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ONTARIO GEOLOGICAL SURVEY

Open File Report 6009

Garden–Obonga Lake Area High Density Lake Sediment and Water Geochemical Survey, Northwestern Ontario

by

J.E. Jackson and R.D. Dyer

2000

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TABLE OF CONTENTS

ABSTRACT ix

INTRODUCTION 1

BEDROCK GEOLOGY 1

PHYSIOGRAPHY AND QUATERNARY GEOLOGY 5

SAMPLING METHODS 5

SAMPLE PREPARATION AND ANALYTICAL METHODS 7

QUALITY CONTROL RESULTS 8
Lake Sediment 8
Lake Water 10

DISCUSSION OF REGIONAL GEOCHEMICAL PATTERNS 10

DESCRIPTION OF ANOMALOUS AREAS 14

CONCLUSIONS 24

AKNOWLEDGEMENTS 24

REFERENCES 24

APPENDIX A Proportional dot maps of pH, conductivity, lake depth, Al, As, Ca, Ce, Cr, Ni, U and Yb in lake waters 29

APPENDIX B Lake sediment proportional dot maps for LOI, Ag, As, Au, Ca, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Ti, W, V, Y, Zn and Total REE 41

APPENDIX C Selected lake sediment analyses for As, Au, Co, Cr, Cu, Fe, Mg, Ni, Pb, U, V, Zn and LOI 61

APPENDIX D Summary of elements analyzed by ICP and INAA for 34 stream sediment samples and 1 soil sample 93

APPENDIX E Lithogeochemical analyses by ICP-MS and INAA for rock and boulder samples from the Tommyhow Lake and Mooseland River areas 101

APPENDIX F Summary table of KIMs, MMSIMs, gold grains and electron microprobe analyses for alluvial sediment samples 105

CONVERSION TABLE 107

FIGURES

Figure 1 Location map of the Garden-Obonga Lake sediment and water survey area. 2

Figure 2 Generalized bedrock geology, Garden-Obonga Lake study area. 3

Figure 3 Generalized Quaternary geology of the Garden-Obonga Lake area. 6

Figure 4 Location of geochemically anomalous areas. . . .13

Figure 5 Land tenure map for the Garden-Obonga Lake area 15

Figure 6 Sample site location map, Garden-Obonga Lake study area. . . . . .back pocket

TABLES

Table 1 Garden-Obonga Lake study area, lake sediment dataset, summary of elements analyzed by ICP and INAA and quality control data including estimates of precision. 9

Table 2 Garden-Obonga Lake study area, lake water dataset, summary of elements analyzed by ICP-MS and quality control data including estimates of precision. 11

ABSTRACT

A helicopter supported high density lake sediment and water geochemical survey of the Garden Lake - Obonga Lake area was completed during the summer of 1998. The study area is located approximately 130 km north of Thunder Bay in northwestern Ontario. Lake sediment samples were collected at 1951 sites and water samples were collected from 2138 sites. Preliminary interpretation of the geochemical patterns has outlined 18 anomalous areas. The anomalous elements include: Au, Ni, Cu, Pb, Zn, Ag, As, Cr, V, W and rare earth elements. The anomalous areas are loosely ranked in order of their exploration interest. As of February 2000, most of the anomalous areas were open for staking. Digital geochemical data for this survey has been released separately from this report as Miscellaneous Release-Data (MRD) 51.

INTRODUCTION

Fieldwork for a high density lake sediment and water geochemical survey of the Garden Lake-Obonga Lake area was carried out between July 6 and August 9, 1998. The survey area is located approximately 130 km north of Thunder Bay (Figure 1). The survey completely covered the area defined by National Topographic System (NTS) 1:50 000 scale map sheets 52G/9, 52H/12, 52H/13 and partially covered the area outlined by map sheets 52G/8, 52H/5, 52H/6, 52H/11 and 52H/14.

Lake sediment and/or water samples were collected at 2138 sites for an average density of 1 sample per 2.2 km^2. Stream/river sediments and/or waters were collected from 23 sites. In addition, 15 rock samples were collected and submitted for geochemical analysis. One sample from soil overlying an intensely weathered pyritic zone within a sericite schist outcrop was collected in the Tommyhow Lake area.

The Garden Lake area was selected for this type of geochemical survey for several reasons. These include, client interest in the area, a relative deficiency of exploration data for the region and recent speculation that felsic rocks of the same age as those of the Sturgeon Lake belt may occur in the Obonga-Garden Lake area (Tomlinson et al. 1996)

Some of the lakes in the southern half of the study area were sampled during the national geochemical reconnaissance (NGR) lake sediment program that was undertaken during the late 1970s by the Geological Survey of Canada (Friske et al. 1990). Samples were collected at a relatively low density of 1 sample per 13 km^2.

BEDROCK GEOLOGY

The most recent bedrock mapping and data compilation of the entire study area was completed by Sage (et al.1974, 1998). The Garden Lake area was mapped in detail by Milne (1964) and Hart (1999). Mapping of the Obonga Lake area was completed by Kustra (1966) and Thurston (1967). The Metionga Lake area, in the northwestern portion of the study area, was mapped by Rogers (1964). Refinements and re-evaluations of this early work, augmented by additional lithogeochemical analysis, has occurred in recent years in an effort to unravel the age and genesis of the supracrustal rocks in the region (e.g., Blackburn et al. 1991, Cortis et al. 1988, Thurston et al. 1987, Tomlinson et al. 1996).

The Garden Lake greenstone belt strikes easterly for a distance of approximately 75 km, from Allely Lake in the west to the Gull River in the east (Figure 2). The widest portion of the belt lies between the Gull River and Weaver Lake. Here the geology consists of predominantly mafic metavolcanic rocks with a thin core

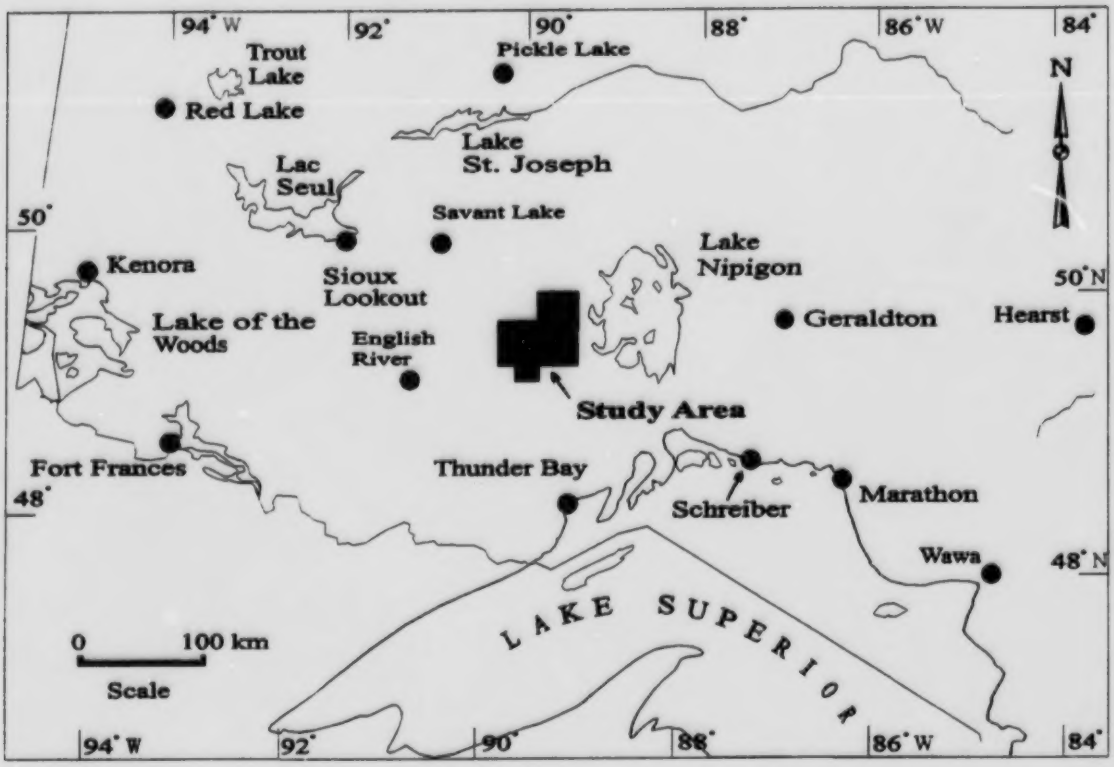

Figure 1. Location map of the Garden-Obonga Lake sediment and water survey area.

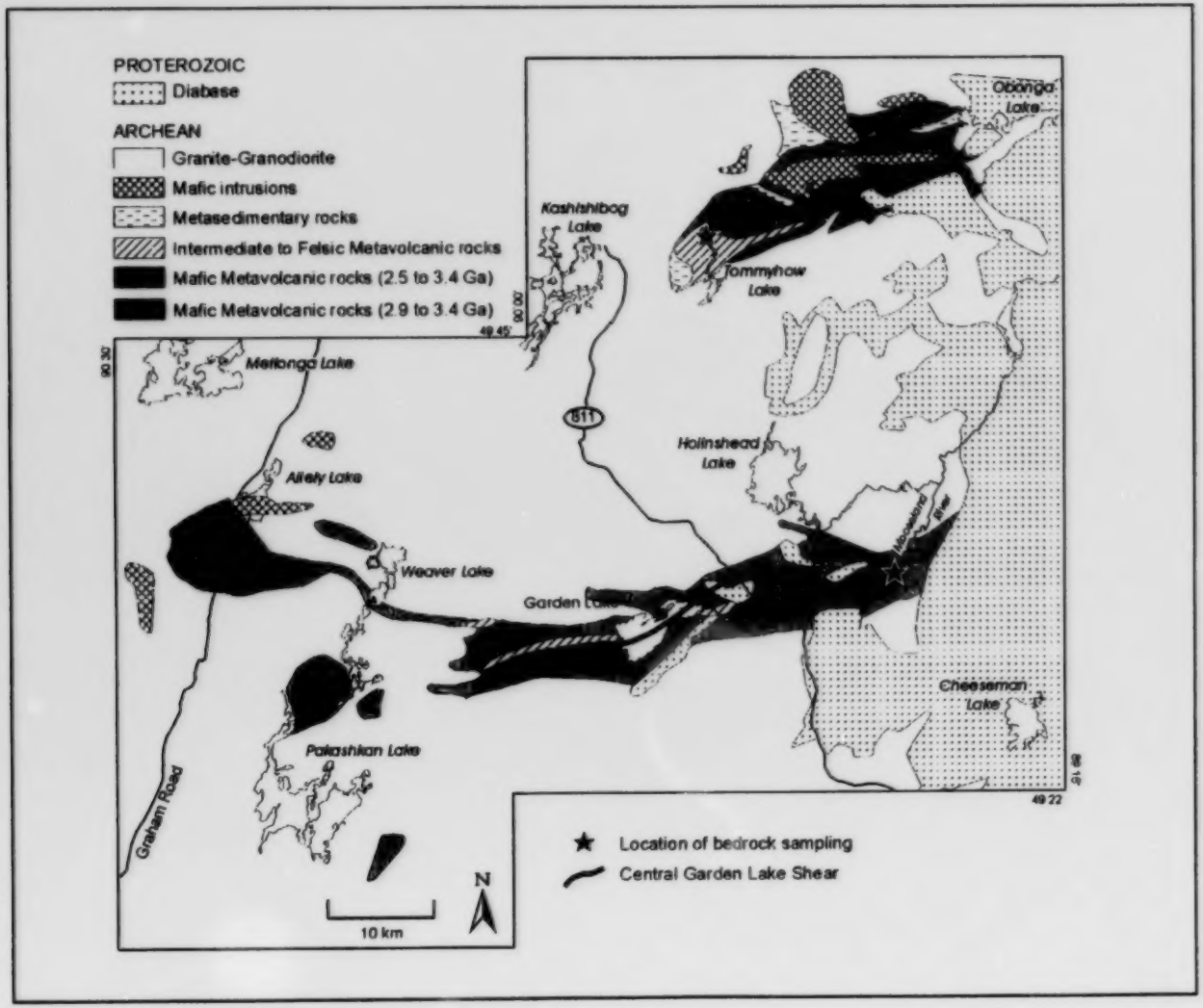

Figure 2. Generalized bedrock geology, Garden Lake-Obonga Lake study area (after Ontario Geological Survey 1991)

of metasediments between Garden Lake and Kearns Lake (Sage 1998).

Flat lying Nipissing diabase occurs locally and covers the eastern end of the greenstone belt. The greenstone belt west of Weaver Lake is thin but reaches a width of approximately 5 km at Allely Lake, at the extreme western end of the belt. The predominant rock type in this western portion of the belt is mafic metavolcanics, although outcrop exposure is poor (Sage 1998). A mafic intrusive body occurs at Allely Lake and another at Twining Lake, located to the southwest of the greenstone belt at the edge of the survey area (Sage 1998).

Milne (1964) noted a zone of particularly intense shearing within the central part of the belt. Sage (1998) also reported evidence of strong tectonic activity along the granite-greenstone boundaries of the Garden Lake belt. Thurston et al. (1987) identified the structure along the core of the belt as the Central Garden Lake Shear.

Gold was first discovered during the 1930s in quartz veins east of Conick Lake, near the northern granite-greenstone boundary (Milne 1964). Thereafter, sporadic prospecting/exploration activity in the Garden Lake belt has concentrated on gold and associated sulphide occurrences. For example, gold and pyrite in sheared, silicified and carbonatized metavolcanics were reported by Little Long Lac Gold Mines Ltd. in 1946 along the southeast shore of Garden Lake (Milne 1964).

The Obonga Lake greenstone belt lies north of the Garden Lake greenstone belt and is approximately 32 km long. It consists of an east striking synclinally folded sequence of mafic and felsic metavolcanic rocks, metasedimentary rocks and mafic to ultramafic intrusions (Sage 1998). The eastern end of the belt is overlain by Proterozoic rocks, predominantly flat lying diabase. A thickening of felsic volcanic rocks occurs toward the western end of the belt, becoming thickest in the area north of Tommyhow Lake (Sage 1998). Along the northern margin of the belt, in the vicinity of Chrome and Puddy lakes, a serpentinite body is present.

Intermittent exploration efforts in the Obonga greenstone belt have focused on the PGE-chrome-base metal potential of the mafic-ultramafic intrusives and the base metal potential of the felsic volcanic rocks near Tommyhow Lake. A chromite mine was operated briefly during the 1930s by Chromium Mining and Smelting Co. Ltd. at Chrome Lake (Sage 1998). More recently, Houston Lake Mining Inc. has acquired mining claims at Puddy Lake with the intention of exploring for PGMs (platinum group minerals).

Previous exploration in the Tommyhow Lake area has included airborne geophysics and diamond drilling. Massive and disseminated pyrite has been reported (Sage 1998) but apparently no economic base metals have been found to date. It is not known if the area has been examined for precious metal (gold) potential.

PHYSIOGRAPHY AND QUATERNARY GEOLOGY

Gentle topography characterizes most of the study area with local relief rarely exceeding 50 m. The most rugged topography occurs in the east and northeast part of the study area, where the bedrock is dominated by flat lying Proterozoic diabase. Spectacular cliffs and talus slopes are common in the area near Obonga Lake.

Systematic, detailed Quaternary geological mapping has not been conducted over the study area. Reconnaissance Quaternary mapping (1:506 880) was completed by Zoltai (1965). Engineering geology terrain maps, at a scale of 1:100 000, were produced for the region between 1980 and 1983 (Mollard and Mollard 1980a, 1980b, 1981, 1983). A more recent regional compilation of the Quaternary geology of the area has been completed by Barnett et al. (1991). These sources indicate that surficial materials within the study area consist predominately of a thin discontinuous veneer of glacial drift (till) over bedrock (Figure 3). Glaciofluvial deposits occur locally, most notably in the south and southeast parts of the region surveyed, where short sections of the Lac Seul, Hartmann and Kaiashk moraines cross into the survey area. A short section of the Sioux Lookout moraine is present in the northwestern corner of the survey area. A number of north trending eskers, up to 20 km long, occur in the southern half of the study area. This north to south esker orientation corresponds with the general direction of ice margin retreat from the area.

Modern fluvial deposits occupy major river valleys, such as those of the Mooseland, Roaring and Gull rivers. Glaciolacustrine sand, silt and clay occur locally, increasing in extent toward Lake Nipigon in the east.

SAMPLING METHODS

Organic lake sediment samples were collected from a helicopter float using the Ontario Geological Survey (OGS) designed gravity corer. On average, 24 lakes were sampled per hour of helicopter time. In order to avoid anthropogenic influences and water/sediment interface effects (i.e., increased Mn due to anoxic conditions that result in secondary accumulation of base metals), only deep sediment (>20 cm below the sediment surface) was collected. This sediment better reflects the effects of natural geochemical inputs that may be related to local geology.

Lake water samples were collected at a depth of 0.5 m from shallow lakes (<3 m deep) and at a depth of 2 m from deep lakes (>3 m). A semi-automated water sampling apparatus, developed by the OGS, was utilized for water collection. The apparatus consists of a submersible pump, a flow cell (for measurement of parameters such as pH, conductivity, oxidation-reduction potential and dissolved

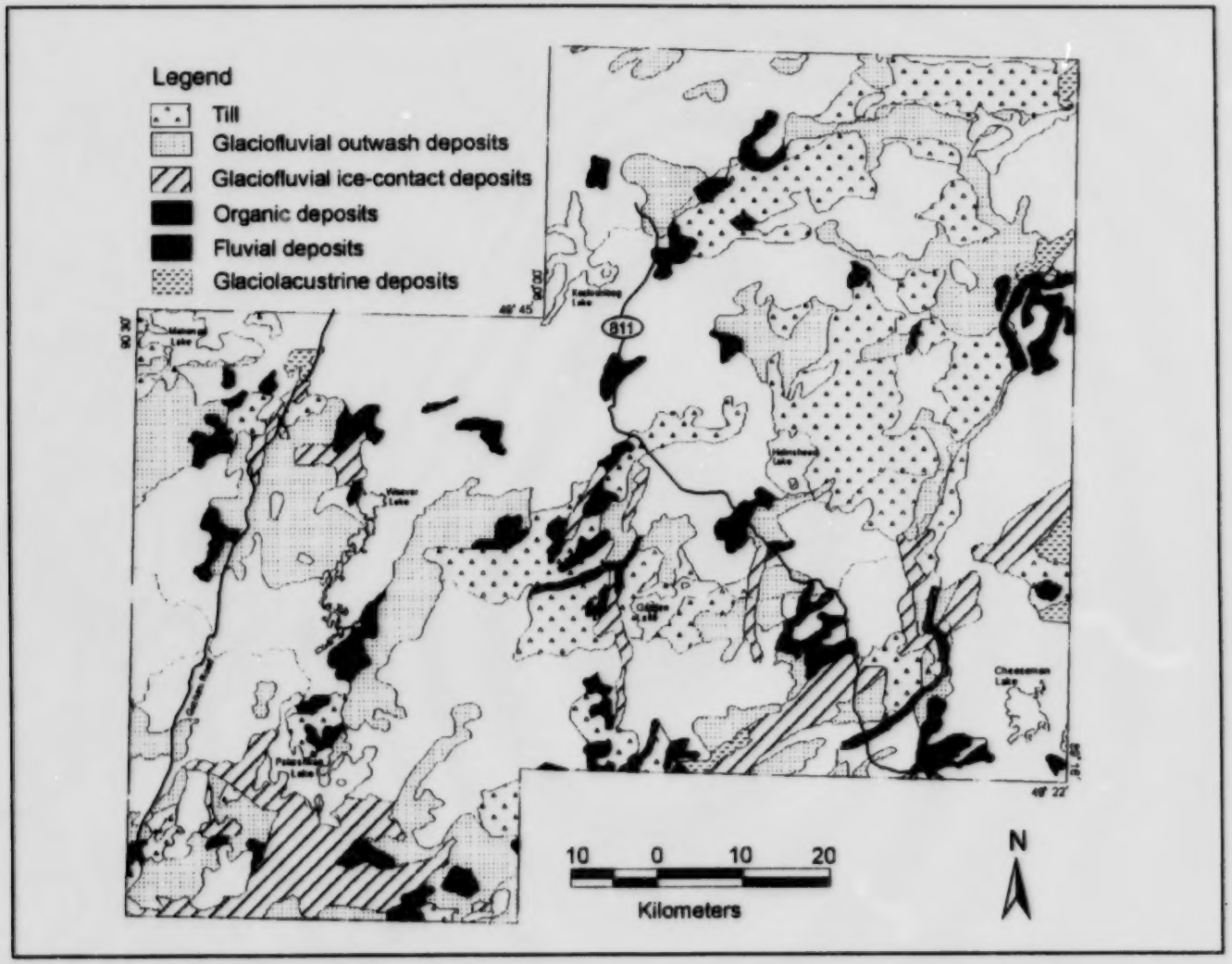

Figure 3: Generalized Quaternary geology of the Garden-Obonga Lake area (after Barnett 1991).

oxygen), a sample bottle tray and various hoses and pinch valves. Water is pumped from the lake and allowed to purge the sampling system prior to the collection of a water sample and the recording of water quality parameters. Water samples were kept cool after collection and processed (filtered and acidified) within 6 hours of collection.

River/stream sediment samples were collected by shovel or with a home made scoop fashioned out of a plastic bottle. In some cases, river sediment was collected with the lake sediment sampler from the helicopter float. Where streams crossed a road, the sample(s) were taken approximately 25 to 50 m upstream of the road. On narrow, low energy streams, sediment was collected from the stream bottom and typically had a high organic component. In high energy streams/rivers, samples were collected from several locations including the lee of large boulders, quiet pools (at the tail of bars or outside portion of river bends) and the top surface of gravel bars. In all cases, an attempt was made to sample active, inorganic, silt/sand sediment.

A GPS receiver was utilized to record accurate sample site positions. A customized database application operated on a pen based computer was used to record sample descriptions and observations. Data from the water quality probe was also monitored and recorded with the pen based computer.

SAMPLE PREPARATION AND ANALYTICAL METHODS

Lake sediment samples were placed in breathable fabric bags and allowed to partially air dry prior to shipment to the laboratory. The samples were then freeze dried (to retain volatile elements), partially pulverized in a ceramic ring and puck pulverizer and sieved to obtain the -80 mesh (<177 µm) size fraction. Laboratory analysis included nitric-aqua regia digestion followed by inductively coupled plasma-mass spectrometry (ICP-MS) to determine approximately 50 trace elements. Mercury was determined by cold vapour-flameless atomic absorption spectrometry. Nitric acid-aqua regia digestion attacks all sample matrix constituents, except silicate minerals, and therefore is considered a nonselective, relatively strong partial extractant.

Approximately 15 gm of sample pulp were pressed into briquettes and analyzed by instrumental neutron activation analysis (INAA) for Au and a suite of 34 other elements. Quality control was monitored through the use of sample pulp duplicates and certified reference materials. Loss-on-ignition (LOI) was determined at 500°C., using an automated gravimetric technique.

Water samples were passed through 0.45 µm syringe filters and acidified to 1% ultrapure nitric acid within 6 hours of collection. Analysis of water includes direct aspiration ICP-MS to determine

approximately 50 elements including major cation and anion species. Quality of the analyses was monitored through the use of sample duplicates, certified reference standard SLRS-3 and blanks.

Stream sediment samples were placed in breathable fabric bags after collection and air dried. Samples were gently dissagregated and then sieved to retain the -80 mesh size fraction for INAA and ICP-MS analysis. A distinction between organic and inorganic based sediments is necessary for both INAA and ICP preparation (briquettes vs. vial encapsulation; partial vs. total digestion). This distinction was maintained during data interpretation.

QUALITY CONTROL RESULTS

Lake Sediments

Table 1 contains a summary of the elements analyzed from the lake sediments in the study area. The statistics include median, range, coefficients of variation for the certified reference material and the estimates of precision obtained from sample duplicates. Quality control of the analytical precision and accuracy of the data was maintained using certified standard reference material (lksd-1 and lksd-4) and sample pulp duplicates randomly distributed throughout the sample sequence. A complete listing of all the geochemical data used to prepare this table is contained in the Miscellaneous Release-Data (MRD-51), published separately from this report.

Generally, the analytical data for the Garden-Obonga Lake area is of good quality. Quality control (QC) problems were detected for a number of elements in the ICP-MS analytical data. Sample duplicates and reference materials indicated precision problems with Be, Ca, Cu, Ga, Li, Pb, Nb, Sr, and Ta. The elements, Be, Ga, Nb and Ta indicated significant quality control problems that they were removed from the ICP-MS dataset. Copper, calcium and strontium have isolated quality control problems within the sample series and have been replaced by better geochemical analyses from the ICP-OES dataset. Lead contained serious QC problems between samples 98RDD2090 to 98RDD2250. These values have been stripped from the dataset. Minor precision problems and analytical drift has been detected for the lithium data. Interpretations involving lithium should be exercised with some caution.

The ICP-OES dataset indicated quality control problems with Be, Cd, Cr, Eu, K, Li, Mo, Na, Ni, Sr and Ti. Beryllium, lithium, and molybdenum contained significant quality control problems. These elements have been deleted from the ICP-OES analyses. The ICP-MS and INAA data provided better analytical

Element	Analytical Method	Units	MDL	Lake Sediment (n=1951) Median	Range Min	Range Max	Estimated Precision	LKSD-1 Reference Standard (n=31) Certified Value	Mean Q.C. Result	Coefficient of variation (%)	LKSD-4 Reference Standard (n=29) Certified Value	Mean Q.C. Result	Coefficient of variation (%)
Ag	ICP-MS	ppm	0.05	0.09	<0.05	41.01	±0.08	0.6	0.59	10.2	0.2	0.24	19.0
Al	ICP-OES	ppm	30	10235	<30	34378	±2283	41300	4571	15.7	31200	12939	5.6
As	INAA	ppm	0.5	2.3	<0.5	69.9	±1	40	38	3.2	16	16.6	4.1
Au	INAA	ppb	2	<2	<2	28	±4	5	5	35.1	2	2	74.7
Ba	ICP-OES	ppm	3	95	<3	2370	±26	430	113	11.3	330	166	6.9
Br	INAA	ppm	0.5	37.0	4.8	260	±5.2	11	11	3.9	49	50.8	3.4
Ca	ICP-OES	ppm	20	5546	<20	154831	±3225	77200	63708	16.0	12900	9528	18.8
Cd	ICP-MS	ppm	0.5	0.5	<0.5	120.6	±0.3	1.2	1.6	10.0	1.9	2.08	6.4
Ce	ICP-MS	ppm	0.01	45.08	<0.01	242.93	±22.8	27	17.17	7.7	48	39.49	6.2
Co	ICP-MS	ppm	1	7.23	<1	83	±3	9	7.84	4.9	11	8.97	6.8
Cr	ICP-MS	ppm	1	20	<1	488	±9	12	12	17.8	21	20	11.0
Cs	ICP-MS	ppm	0.01	0.53	<0.01	144.26	±0.12	1.5	0.5	4.7	1.7	1.04	6.3
Cu	ICP-OES	ppm	5	33	<5	1255	±13	44	50	9.1	30	35	5.5
Dy	ICP-MS	ppm	0.01	2.05	<0.01	389.77	±0.74	3.4	1.73	9.4	3.7	2.99	6.3
Er	ICP-MS	ppm	0.01	1.08	<0.01	268.40	±0.36	-	0.96	10.2	-	1.67	5.6
Eu	ICP-MS	ppm	0.01	0.72	<0.01	183.22	±0.19	0.9	0.49	10.5	1.1	0.9	8.2
Fe	ICP-OES	ppm	5	17070	<5	348497	±8356	18000	20412	7.7	27000	27351	6.0
Fe	INAA	%	0.2	1.9	<0.2	10.0	±0.8	1.8	2.8	9.2	2.7	3.0	5.4
Gd	ICP-MS	ppm	0.01	3.69	<0.01	44.53	±2.42	-	2.42	9.7	-	4.29	10.0
Hf	INAA	ppm	1	1	<1	9	±1.5	3.6	4	17.0	2.8	3.0	15.3
Ho	ICP-MS	ppm	0.01	0.40	<0.01	78.13	±0.11	-	0.34	9.0	-	0.59	5.3
K	ICP-OES	ppm	100	370	<100	1468	±195	9100	452	21.1	6600	1008	13.1
La	ICP-MS	ppm	0.01	27.62	<0.01	229.07	±11.2	16	10.22	6.1	26	21.14	5.1
Li	ICP-MS	ppm	1	3.8	<1	966.3	±1.5	7	4.3	17.0	12	8.9	11.3
Lu	ICP-MS	ppm	0.01	0.16	<0.01	38.09	±0.06	0.4	0.14	12.6	0.5	0.25	6.5
Mg	ICP-OES	ppm	20	1740	<20	19126	±501	10300	7320	8.8	5400	4387	6.6
Mn	ICP-OES	ppm	1	205	<1	67426	±53	460	470	7.4	430	459	5.1
Mo	ICP-MS	ppm	1	1.2	<1	201.4	±0.5	12	9.9	4.0	2	1.7	8.9
Na	INAA	%	0.02	0.21	<0.01	2.4	±0.11	14800	1.48	10.1	5200	0.6	8.3
Nd	ICP-MS	ppm	0.01	24.87	<0.01	339.54	±9.56	16	11.8	7.7	25	22.79	5.8
Ni	ICP-MS	ppm	5	17.2	<5	191.3	±3.8	11	14.4	15.0	32	31.8	5.9
P	ICP-OES	ppm	50	898	<50	17050	±233	900	867	6.7	1300	1489	4.7
Pb	ICP-MS	ppm	0.1	3.21	<0.1	1159.42	±2.0	84	76.6	6.1	93	86.9	4.9
Pr	ICP-MS	ppm	0.01	6.84	<0.01	95.28	±3.39	-	2.88	7.1	-	5.79	6.3
Rb	ICP-MS	ppm	0.01	4.40	<0.01	38.57	±1.33	24	3.55	9.2	26	10.14	8.4
S	ICP-OES	ppm	30	3064	<30	42432	±667	15700	17887	7.3	9900	10806	5.6
Sb	INAA	ppm	0.2	0.10	0	6	±0.1	1.2	1.2	5.2	1.5	1.8	3.8
Sc	ICP-MS	ppm	0.5	3.1	<0.5	161.7	±1.8	9	2.6	25.6	7	4	12.9
Sm	ICP-MS	ppm	0.01	4.02	<0.01	741.18	±1.53	4	2.51	7.1	5	4.23	5.5
Sr	ICP-OES	ppm	1	18	<1	231	±5	250	72	9.1	110	44	5.5
Tb	ICP-MS	ppm	0.01	0.47	<0.01	127.3	±0.28	0.6	0.34	9.9	1.2	0.59	10.1
Th	INAA	ppm	0.5	5.4	0.7	117.0	±1	2.2	2.1	6.0	5.1	5.3	4.5
Ti	ICP-OES	ppm	3	177	<3	1330	±94	3010	359	13.8	2270	474	12.7
Tl	ICP-MS	ppm	0.05	0.11	<0.05	41.39	±0.04	-	0.21	6.3	-	0.41	5.6
Tm	ICP-MS	ppm	0.01	0.15	<0.01	36.6	±0.07	-	0.13	11.3	-	0.24	6.3
U	ICP-MS	ppm	0.02	1.38	<0.01	192.97	±0.44	9.7	8.48	5.0	31	20.91	3.8
U	INAA	ppm	0.5	1.7	<0.5	158	±0.45	9.7	9.8	5.1	31	31.70	3.8
V	ICP-OES	ppm	5	57	<5	723	±22	27	26.6	10.5	32	37.3	5.6
W	ICP-MS	ppm	0.05	0.10	<0.05	84.42	±0.07	<4	0.66	22.5	<4	0.25	21.6
Y	ICP-MS	ppm	0.5	10.8	<0.5	112.3	±3	19	10.3	7.6	23	16.8	5.1
Yb	ICP-MS	ppm	0.01	0.97	<0.01	228.63	±0.28	2	0.86	11.4	2	1.60	6.5
Zn	ICP-MS	ppm	5	77	<5	2779	±17	337	333	5.0	189	190	6.7
Zn	ICP-OES	ppm	2	86	<2	1163	±18	337	348	8.0	189	202	5.3
LOI	Grav.	%	0.01	44.52	10.11	91.17	±0.9	23.5	22.9	0.8	40.8	40.7	0.5

Notes:

1. ICP-MS= Inductively Coupled Plasma Mass Spectroscopy. (aqua-regia digestion)
2. ICP-OES= Inductively Coupled Plasma Optical Emission Spectroscopy. (aqua-regia digestion)
3. INNA= Instrumental neutron activation analysis.
4. MDL=method detection limit.
5. Estimated precision at 95% confidence level; ICP-MS and OES elements based on results of 118 duplicate pairs.
6. Q.C. Result = Average value obtained, Garden-Obonga Lake dataset.
7. Coefficient of variation at one standard deviation (68% confidence level)
8. LKSD-1 and LKSD-4 are Canmet certified reference materials; For ICP elements, quoted reference values for Ag, As, Cd, Co, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Sb, V, Zn determined by partial digestion; all other ICP elements determined with total digestion. For INAA elements, quoted reference values for LKSD-1 and LKSD-4 are from total digestion methods.

Table 1: Garden-Obonga Lake survey, lake sediment dataset, summary of elements analyzed by ICP and INAA and quality control data, including estimates of precision.

precision for Cd, Cr, Eu, Li, Mo, Na and Ni. Minor QC issues are evident in the K, Sr and titanium data. Strontium and titanium contain areas of analytical drift in the data series between samples 98RDD-0540 to 98RDD-0580 and 98RDD-1250 to 1335. Caution should be used when interpreting data using the elements K, Sr and Ti.

Gold displays some QC problems in the INAA data. The coefficient of variation for Au in the lksd-1 reference material is 35.1% and for the lksd-4 material is 74.7%. These high values are largely due to the fact that the gold data for the reference materials are at or near the detection level for this method. The estimated precision of ±4 ppb for gold is acceptable and typical for the INAA method. Gold assays should be treated with some caution, especially for single-sample or single-element anomalies.

Lake Water

Analytical precision and accuracy of the water data was assessed using Saint Lawrence River Standard reference material (SLRS-3) and sample duplicates randomly inserted into the sample series. Table 2 contains some basic statistical data listing the median, range, estimated precision and coefficient of variation for the SLRS-3 for each of the elements analyzed.

The quality control methods detected some serious problems with several of the elements analyzed in the lake water dataset. Analytical results for Ag, Au, Ba, Be, Bi, Cd, Cu, Hf, Nb, Pb, Sr, Ta, Tb, Tl, Tm, W, and Zn have been deemed unacceptable and have not been included in MRD-51. Antimony and tin contained isolated QC problems within the data series and those samples have been stripped from the assay sequence. Elements with minor QC problems or analytical drift include Al, Ca, Co, Cr, Fe, Ga, Li, Mg, Ni, Sc, Ti and Th and these elements should be used with some caution for interpretation purposes.

DISSCUSSION OF REGIONAL GEOCHEMICAL PATTERNS

Proportional dot maps for pH, conductivity, lake depth, Al, As, Ca, Ce, Cr, Ni, U and Yb in lake waters are contained in Appendix A. Lake sediment dot maps for LOI, Ag, As, Au, Ca, Cr, Cu, Mg, Mn, Mo, Ni, Ti, W, V, Y, Zn and total REE are contained in Appendix B. Lake sediment samples with loss-on-ignition of less than 10% were not included on these maps but are included in the MRD-51 digital data release. Selected analytical data for lake sediment samples is provided in Appendix C and all analytical data is included in the digital (MRD-51) data release. Appendix D contains geochemical data for stream sediment samples collected during this survey. The geochemical analyses of the rock and boulder samples taken from

Element	Analytical Method	Units	MDL	Lake Water (n=2138) Median	Range Min	Range Max	Estimated Precision	SLRS-3 Reference Standard (n=24) Certified Value	Mean Q.C. Result	Coefficient of variation (%)
Al	ICP-MS	ppb	0.08	1.85	<0.08	43.16	**±2.23**	31	2.3	**18.0**
As	ICP-MS	ppb	0.02	0.36	<0.02	10.17	**±0.29**	0.72	0.83	**12.9**
Ca	ICP-MS	ppb	20	2519	<20	39522	**±3841**	6000	4294	**28.3**
Ce	ICP-MS	ppb	0.001	0.088	<0.001	8.026	**±0.123**	n/a	0.280	**9.1**
Co	ICP-MS	ppb	0.008	0.022	<0.008	2.013	**±0.035**	0.027	0.024	**21.9**
Cr	ICP-MS	ppb	0.01	0.19	<0.01	14.68	**±0.22**	0.3	0.273	**14.4**
Cs	ICP-MS	ppb	0.002	0.006	<0.002	0.102	**±0.004**	n/a	0.006	**18.6**
Dy	ICP-MS	ppb	0.001	0.006	<0.001	0.208	**±0.006**	n/a	0.020	**13.3**
Er	ICP-MS	ppb	0.001	0.004	<0.001	0.204	**±0.004**	n/a	0.011	**10.4**
Eu	ICP-MS	ppb	0.001	0.003	<0.001	0.202	**±0.003**	n/a	0.008	**16.8**
Fe	ICP-MS	ppb	0.4	81.7	<0.4	2132.3	**±180**	100	70.8	**13.3**
Ga	ICP-MS	ppb	0.006	0.079	<0.006	2.633	**±0.059**	n/a	0.225	**25.0**
Gd	ICP-MS	ppb	0.001	0.01	<0.001	0.214	**±0.021**	n/a	0.034	**17.4**
Ho	ICP-MS	ppb	0.001	0.001	<0.001	0.200	**±0.002**	n/a	0.004	**15.2**
La	ICP-MS	ppb	0.001	0.068	<0.001	2.189	**±0.115**	n/a	0.237	**9.7**
Li	ICP-MS	ppb	0.008	0.472	<0.008	2.681	**±0.35**	n/a	0.526	**16.7**
Lu	ICP-MS	ppb	0.001	0.001	<0.001	0.207	**±0.002**	n/a	0.002	**39.6**
Mg	ICP-MS	ppb	5	22	<5	12916	**±796**	1600	1209.1	**24.7**
Mn	ICP-MS	ppb	0.08	8.41	<0.08	806.73	**±23.8**	3.9	13.8	**10.3**
Mo	ICP-MS	ppb	0.1	0.1	<0.1	2.80	**±0.1**	0.19	0.20	**10.9**
Nd	ICP-MS	ppb	0.001	0.062	<0.001	1.593	**±0.069**	n/a	0.221	**8.4**
Ni	ICP-MS	ppb	0.12	0.24	<0.12	65.01	**±0.64**	0.83	0.75	**23.7**
Pr	ICP-MS	ppb	0.001	0.016	<0.001	0.455	**±0.018**	n/a	0.06	**8.8**
Rb	ICP-MS	ppb	0.008	1.116	<0.008	5.949	**±0.645**	n/a	1.61	**8.8**
Sb	ICP-MS	ppb	0.01	0.020	<0.01	0.487	**±0.173**	0.12	0.152	**10.0**
Sc	ICP-MS	ppb	0.004	0.216	<0.004	2.182	**±0.372**	n/a	0.21	**31.6**
Sm	ICP-MS	ppb	0.001	0.010	<0.001	0.215	**±0.016**	n/a	0.042	**10.2**
Sn	ICP-MS	ppb	0.008	0.096	<0.008	29.744	**±0.146**	n/a	0.010	**168.7**
Th	ICP-MS	ppb	0.008	0.007	<0.008	0.146	**±0.012**	n/a	0.006	**32.3**
Ti	ICP-MS	ppb	0.004	0.242	<0.004	7.329	**±0.291**	n/a	0.619	**80.5**
U	ICP-MS	ppb	0.001	0.012	<0.001	0.891	**±0.006**	0.045	0.041	**8.9**
V	ICP-MS	ppb	0.003	0.304	<0.003	10.255	**±0.314**	0.3	0.31	**17.7**
Y	ICP-MS	ppb	0.001	0.04	<0.001	0.57	**±0.034**	n/a	0.124	**9.6**
Yb	ICP-MS	ppb	0.001	0.001	<0.001	0.20	**±0.004**	n/a	0.011	**11.0**
Zr	ICP-MS	ppb	0.04	0.04	<0.04	5.54	**±0.09**	n/a	0.07	**12.6**

Notes:

1. ICP-MS= Inductively Coupled Plasma Mass Spectroscopy.
2. MDL = method detection limit
3. Estimated precision at 95% confidence level; based on results of 117 duplicate pairs.
4. SLRS-3 = National Research Council, Saint Lawrence River Standard #3: certified reference standard
5. Coefficient of variation at one standard deviation (68% confidence level)

Table 2: Garden-Obonga Lake Survey, lake waters dataset, summary of elements analyzed by ICP-MS and quality control data, including estimates of precision.

the Tommyhow Lake and Mooseland River areas are listed in Appendix E. Four samples of inorganic river sediments were collected and analyzed for gold grains, heavy mineral concentrate and kimberlite indicator minerals. Appendix F contains a table of the indicator mineral data for the alluvial sediment samples and electron microprobe analyses of selected ilmenite, chromite and pyroxene grains.

The mean values for pH and conductivity in lake waters collected in the survey are 7.13 and 36.9 µS/cm, respectively. The regional patterns of pH and conductivity display definite patterns that can be attributed to the underlying geology. The Obonga Lake greenstone belt displays high conductivity and slightly alkalic pH values concentrated along the southern portion of the belt. This may reflect pervasive carbonatization along structures within the mafic metavolcanics rocks.

High electrical conductivity (EC) and increased alkalinity of lake waters occurs in several clusters along the eastern edge of the survey area. Most of these clusters of higher pH and EC occur along the edges of the Nipissing diabase sills. High pH and EC are not ubiquitous within the diabase and probably reflect a bedrock source lying beneath the sill, at the edges or along structures within the diabase sheet. A probable bedrock source that would contribute to these higher values, are the rocks of the Sibley Group sediments. The Sibley Group contains flat lying shales, sandstones, argillites and carbonate rocks that underlie the Nipissing sills. Occurrences of dolomite are known from the northwest bay of Obonga Lake. Scattered occurrences of Sibley Group sediments are known from Western Bay of Obonga Lake extending south into Cooney Lake, north of Rabelais Lake and along parts of the Roaring and Mooseland rivers (Sage 1998).

The eastern end of the Garden Lake greenstone belt contains moderately anomalous EC and slightly alkalic pH values. The surrounding gneissic terrane shows somewhat lower EC and slightly acidic waters. This may be a reflection of pervasive carbonatization of the metavolcanic rocks and along structures within the belt.

Several northeast trending linear features in the map area correspond with elevated to anomalous element concentrations obtained from lake sediment samples. Deep lakes with high iron and manganese values occur in several locations along these trends. Deep lakes with anoxic conditions and high levels of Fe and/or Mn can scavenge or accumulate base metals in the sediments and create anomalies that do not reflect mineralization in the underlying geology. Some of these linear anomalies also coincide with large-scale geological structures and/or esker deposits.

The results from alluvial sediment samples collected at 4

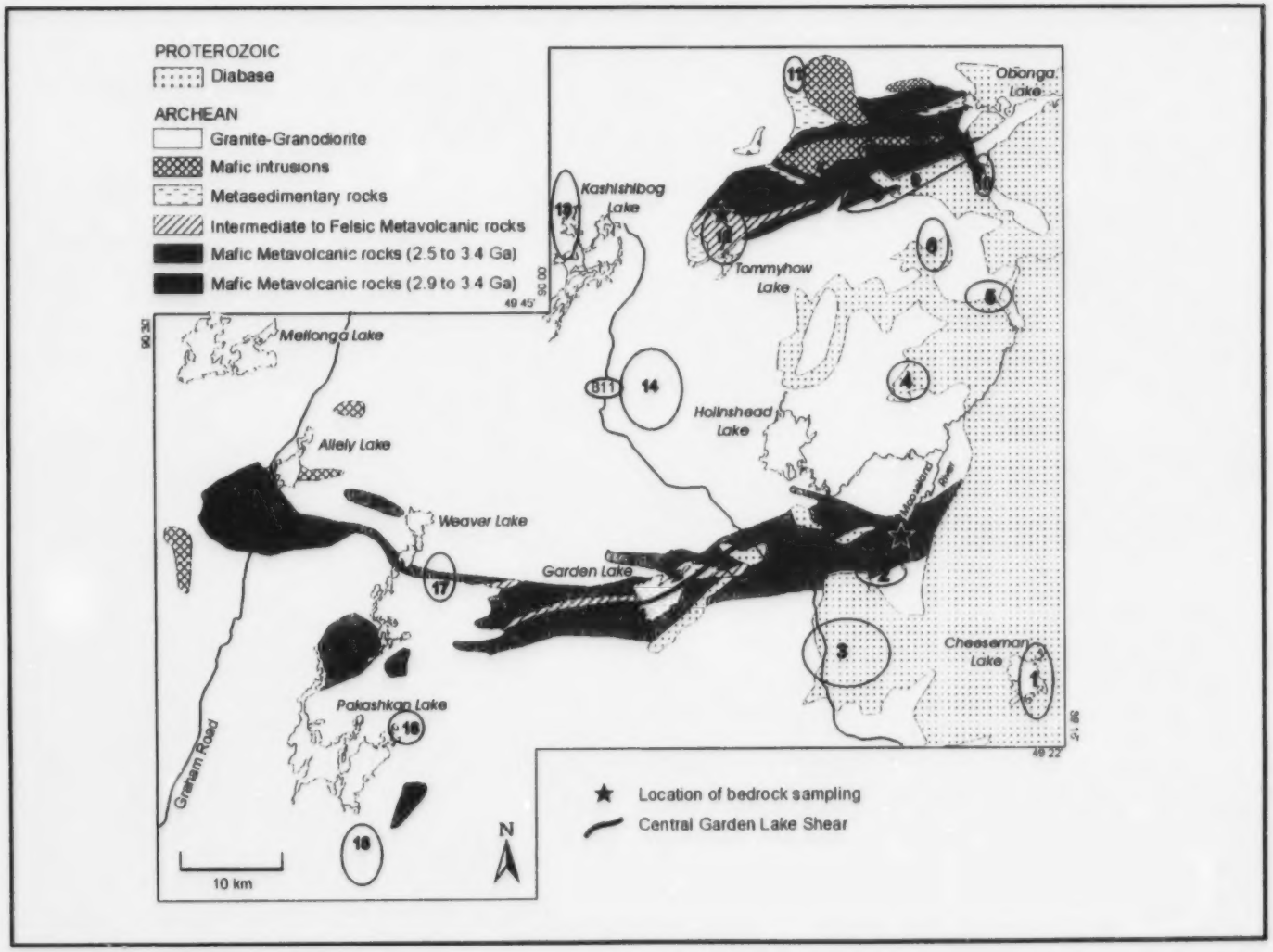

Figure 4: Location of geochemically anomalous areas. Shown on the map is the generalized bedrock geology of the Garden-Obonga Lake survey area.

sites (5000 to 5003) found no kimberlite indicator minerals, no gold grains and no significant concentrations of metamorphosed massive sulfide/magmatic indicator minerals.

DESCRIPTION OF ANOMALOUS AREAS

Eighteen areas containing anomalous base and precious metal concentrations are illustrated on Figure 4 and are described below. The areas are loosely ranked in order of exploration interest. The term "elevated" is used to denote assays above the 90th percentile, "anomalous" for assays above the 95th percentile and "highly anomalous" for assays greater than the 98th percentile.

Two areas with highly anomalous lake sediment base metal contents are not included in the following discussion. The Puddy and Paddon lake areas contain known Ni-Cu (Cr, PGE, Zn, Co) mineralization associated with ultramafic rocks in the northeastern portion of the Obonga Lake greenstone belt. Proportional dot maps show anomalous to highly anomalous values of Ni, Cu, Cr, Zn and Mg in lake sediment samples collected from this area. The presence of the lake sediment anomalies occurring in areas of known mineralization creates confidence in the interpretation process of indicating areas with potential analogous mineralization. Most of the ground in the Puddy and Paddon Lake areas is staked and mineral exploration is continuing. Figure 5 shows the land tenure situation in the Obonga-Garden Lake survey area, as of February 2000.

Area 1: Cheeseman Lake; Au, Ag, Cu

The geology of the area is mapped as massive Keweenawan diabase (Sage 1998). Anomalous lake sediment values ranging from 7 to 13 ppb Au occur in 10 separate locations along the northeastern edge of Cheeseman Lake. This area also contains 16 highly anomalous lake sediment copper values and 12 anomalous lake sediment silver values. The copper values range from 225 to 1255 ppm and contain 11 of the highest copper values in the Garden-Obonga Lake survey. The silver values range from 0.37 to 0.88 ppm. A large number of other elements have one or more elevated to highly anomalous values in this area. These elements include Ni, Zn, Ti, Cr, Mg, Mn, Li, Lu, P, Sc, Y and Yb. The highest value for chromium (488 ppm) and phosphorous (17 050 ppm) collected from the Garden-Obonga Lake survey are both from the Cheeseman Lake area. A quality control check of the gold assays in the Cheeseman lake area indicated that some of the values might be elevated. A review of the duplicates showed a very good correlation between samples 98RDD-1680 and

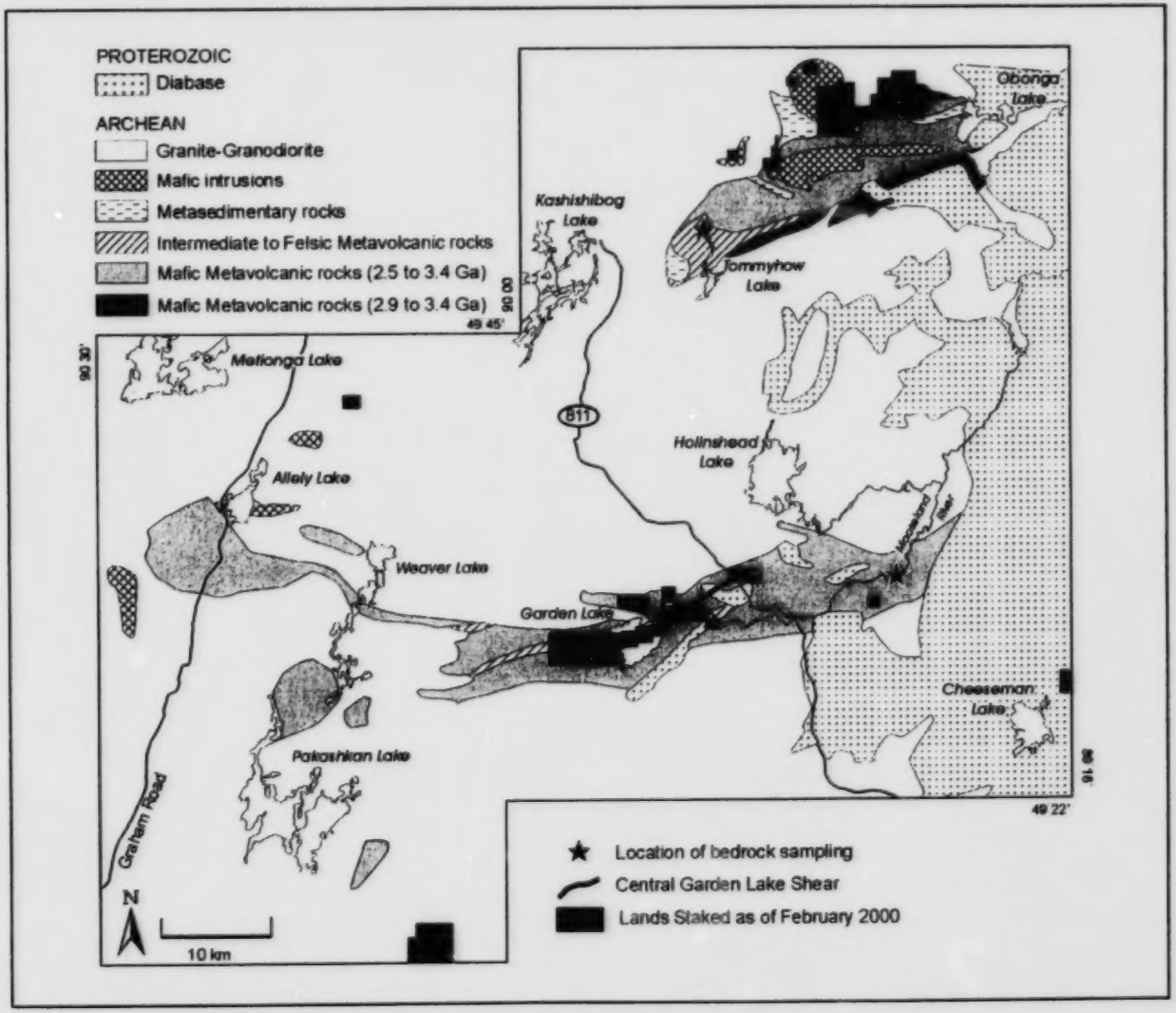

Figure 5: Land tenure map for the Garden-Obonga Lake area.

98RDD-2273 (site 2048, Cheeseman Lake Area) which returned gold values of 11 and 12 ppb, respectively.

Lake sediment sampling completed by the Geological Survey of Canada (GSC) returned an elevated gold value of 8 ppb and an anomalous value of 11 ppb Au from the same area of Cheeseman Lake. The GSC sampling also returned elevated to anomalous values of Cu, Mn, Sc, Lu and Yb.

The elevated to highly anomalous Ni, Cu, Cr, Ti, Mg values obtained from the Cheeseman Lake area may indicate that an ultramafic intrusion lies beneath the diabase sills. This is also corroborated by the GSC sampling which obtained similar elevated and anomalous elements in the Cheeseman Lake area and further southeast in the Disraeli and Leckie lake areas. A number of ultramafic intrusions (picrite) are known to occur in the Nipigon Plate area (Sutcliffe 1987). The picrite in the Disraeli Lake area occurs along a structure that trends northwest towards the Cheeseman Lake area.

The Cheeseman Lake area has the potential for Au-Ni-Cu mineralization associated with an ultramafic intrusive source and may warrant exploration for platinum group minerals. The Heaven Lake greenstone belt lies about 10 km southwest of the Cheeseman Lake area. The eastern portion of the greenstone belt disappears beneath the diabase sills and may underlie the Cheeseman Lake area. As of February 2000, a small group of claims are staked immediately to the east of Geikie Lake.

Area 2: Kitchen Lake Road Area; Au

This area features 2 elevated to weakly anomalous lake sediment gold values of 4 and 5 ppb in 2 small lakes about 5 km southeast of Ruffo Lake. The bedrock geology in the area consists of mafic to intermediate metavolcanic rocks, metasediments and felsic metavolcanic rocks of the Garden Lake greenstone belt. Recent mapping in the Kitchen Lake Road area describes an intensely sheared metavolcanic unit with up to 10% sulphides and iron carbonate alteration (Hart 1999). Near the western end of the Kitchen Lake Road, a felsic metavolcanic unit was observed to contain a sulphide bearing breccia with up to 15 to 20% pyrite mineralization.

The proportional dot map of lake conductivity shows a high electrical conductivity response from the same lake in which the 5 ppb gold value was obtained. Although the gold values are weakly anomalous, other responses from this lake include anomalous arsenic in both lake and water samples, copper and calcium in lake sediments. The copper values are 195 and 200 ppm. The lakes in this area are deep relative to their sizes. Some of the lakes contain anomalous manganese. The lakes may be exhibiting metal

scavenging due to anoxic conditions and/or represent an east trending structure in this portion of the greenstone belt. Arsenopyrite is associated with gold elsewhere in the belt and is described from a gold-quartz-carbonate-bearing zone on Conick Lake located to the north of Garden Lake (Sage 1998). As of February 2000, most of the area was open for staking. One small claim was staked along the Kitchen Lake road.

Area 3: Tarrison Lake; Ni, Cu, Zn

This area is situated between the Garden and Heaven lake greenstone belts on the north side of the Gull River. The Quaternary geology indicates that the Tarragon lake area is covered by glaciofluvial deposits of the Kaiashk Interlobate Moraine. The bedrock geology is mapped as diabase underlain by Archean gneiss. The area contains a string of several lakes with anomalous levels of Ni, Cu, Zn, Mg, Ti and V. Some of the lakes in this cluster also contain anomalous levels of As, Ca, Co, Cr and Mo. Nickel values from 13 lakes in this area range from 31.6 to 65.7 ppm. The copper values range from 88 to 162 ppm in 10 lake sediment sample sites. Four of the lakes have anomalous values greater than 121 ppm Cu. Five sites contain zinc values ranging from 137 to 261 ppm. A large magnetic anomaly over this area is also visible on The Total Magnetic Field map of Ontario (Gupta 1991). Although there is very little outcrop in this area, the anomalous mineral assemblage indicates a possible ultramafic body lying beneath the Quaternary cover. This area has the potential for Ni-Cu mineralization associated with mafic-ultramafic rocks. The PGE potential should also be investigated. The area was open for staking as of February 2000.

Area 4: Grimm Lake; Au, Ni, Cu, Ag, Pb

The Grimm Lake area is located about 12 km northeast of Holinshead Lake near the Gull River. Several clusters of lakes show anomalous Ni, Cu, Au, Ag, Pb, Mg, Ca, W and Mo. The bedrock geology of the area is mapped as Archean migmatitic and felsic intrusive rocks. An outcrop on the north end of Grimm Lake is mapped as a hornblende-biotite trondhjemite to quartz diorite. Proterozoic Nipissing diabase and Sibley Group limestones are mapped in the area. The nickel values range from 30 to 63.8 ppm from 8 lake sediment sample sites. A string of 3 lakes immediately north of Grimm Lake returned anomalous gold values of 5, 7 and 10 ppb. Anomalous copper values range from 98 to 485 ppm in 11 lakes throughout this area. Three of these lakes returned highly anomalous values of over 200 ppm Cu. Two lakes located north of Grimm Lake returned highly anomalous values of 6.36 and 5.08 ppm Ag

and 15.79 and 11.43 ppm Pb. The proportional dot map of conductivity shows high EC values in this area. The presence of Sibley Group limestone may be responsible for some of the anomalous Mg and Ca obtained in the lake samples. The combination of all of the anomalous elements, clustered together from numerous lakes in the area suggests that a mafic to ultramafic bedrock source is contributing to these values. The area should be investigated for gold and base metal potential. The area was open for staking as of February 2000.

Area 5: Pantagruel Lake; Au, Ni, Cu, Zn

The Pantagruel Lake area is located approximately 13 km south of Obonga Lake. The area contains very sparse outcroppings of rock. The bedrock geology is mapped as Nipissing diabase overlying Archean felsic intrusive rocks (Sage 1998). One small outcrop of Sibley Group sandstone/siltstone is known from the eastern end of Pantagruel Lake. Three lake sediment sample sites from 2 small lakes south of Pantagruel Lake returned 1 gold value of 8 ppb and 2 values of 6 ppb gold in lake sediments. The same 2 lakes returned anomalous values of 0.25, 0.32 and 0.35 ppm Ag. Nickel from this area returned 4 highly anomalous values of 59.3, 65.5, 79.4 and 101 ppm Ni. Anomalous copper values ranging from 133 to 268 ppm were obtained from 5 sites in the area. The highest zinc value obtained in the Garden-Obonga survey area (2779 ppm Zn) was obtained from a lake located 600 m west of the southern end of Pantagruel Lake. Several lakes also returned anomalous values for Mg, Ca, Sc and Ti. Two stream sediment samples were collected along the Pantagruel Creek approximately 3 km upstream from Pantagruel Lake. Sites 2014 and 2015 returned anomalous values of Ni, Cu, Mg, Ca and Ti. The stream samples also returned very weak gold values. The gold values are very low, but appear to corroborate the weakly anomalous gold values obtained from the lake sediment samples. The suite of anomalous elements obtained from the Pantagruel area suggests that a mafic-ultramafic source rock is contributing to the geochemical signature of the area. This may be a prospective area for Au-Ni-Cu-mineralization associated with mafic-ultramafic rocks. The area was open for staking as of February 2000.

Area 6: Rabelais Lake; Au, Ni, Cu, Ag

The Rabelais Lake area is located approximately 8.5 km southwest of Obonga Lake. The bedrock geology is the same as that mapped in the Pantagruel Lake area. Two lakes located to the south of Rabelais Lake returned highly anomalous values of 49.2 and 79.5 ppm Ni. The same lakes returned values of 7 and 9 ppb Au with 0.43 and 0.59 ppm

Ag. A separate pair of lakes located further south returned lower values of 3 and 4 ppb gold. Highly anomalous copper values of 212, 259, 373 and 420 ppm were obtained in all 4 of these lakes. Elevated values for calcium and magnesium are seen in most of the area. One lake contains highly anomalous magnesium and scandium. Based on the anomalous geochemical signature, the area has potential for Au-Ni-Cu mineralization associated with mafic-ultramafic intrusive rocks. The area was open for staking as of February 2000.

Area 7: Ottertooth Lake; Au, Cu, As

Several small lakes located about 1 km northwest of Ottertooth Lake contain elevated to highly anomalous levels of gold, copper, arsenic and chromium. The bedrock geology is mapped as massive to pillowed mafic to intermediate metavolcanic rocks intruded by peridotitic to gabbroic rocks of the Core Zone mafic intrusive. The anomalous area is located near the contact of these 2 main units. One lake returned a value of 28 ppb Au with a highly anomalous chromium assay. The gold value obtained from this lake is the highest value obtained from the Garden-Obonga lake survey area. Two adjacent lakes to the west returned lower values of 6 and 3 ppb gold. Five elevated and 2 anomalous copper values of 131 and 184 ppm were obtained from lake sediment sites in this area. Highly anomalous values of arsenic were returned from 8 lakes in the immediate vicinity of the high gold value. The gold, copper and arsenic values obtained in this area indicate potential for gold mineralization possibly related to the intrusion of the mafic to ultramafic Core Zone rocks. A recent study of the stratigraphic and structural evolution of the Obonga Lake greenstone belt indicates that significant east-trending shear zones occur bounding and within the supracrustal assemblages of the belt (Percival and Stott 2000). The potential for gold-quartz veins associated mineralization should also be investigated. As of February 2000, the ground was open for staking.

Area 8: Ottertooth West; Ni, Cu, Cr, As

This anomalous area is located approximately 4 km south of Paddon Lake and to the west of Ottertooth Lake. The bedrock geology is the same as that mapped in the Ottertooth Lake area. Highly anomalous lake sediment values from the area include 94.8 and 103.9 ppm Ni, 144 ppm Cr and 22, 26, 35 and 58 ppm arsenic. Elevated to anomalous lake sediment values for copper and silver are indicated on the proportional dot maps. Other elements with highly anomalous lake sediment values from the area include S, Sb, W, Ca and 1 value of 11.1 ppm Mo. A stream sediment sample (site 1812) collected

from this area returned anomalous values of 31 ppm Ni and 36 ppm Cr. Lake water sample sites from this area indicate a similar suite of anomalous elements. Anomalous to highly anomalous lake water values were obtained for As, Ni, Ca and Mo. The anomalous lakes in this area occur on or near the contact of the Core Zone mafic-ultramafic intrusive and the mafic to intermediate metavolcanic rocks of the southern assemblage. The geochemical anomalies in the area indicate a potential for Ni-Cu mineralization associated with mafic to ultramafic intrusive rocks. As of February 2000, the area was open for staking.

Area 9: Silk Lake; Cu, Zn, Au, As

A cluster of lakes containing elevated to anomalous Cu, Zn, Au, As, Ni, Ca, Mn and Mg extends for 3 km in a northeast direction from the south end of Silk Lake. The Bedrock geology consists of mafic, intermediate to felsic metavolcanic rocks with associated pyroclastic assemblages. The string of anomalous lakes corresponds with the older metavolcanic unit located along the southern contact of the Obonga Lake greenstone belt. The anomalies also parallel an east trending ductile shear zone containing abundant dismembered quartz veins (Percival and Stott 2000). Four lake sediment sites contain elevated values of copper with one highly anomalous value of 277 ppm Cu. Six lakes in the area returned values of 156 to 280 ppm Zn. Five lakes contain anomalous nickel values ranging from 31 to 60.3 ppm Ni. Elevated to highly anomalous values of silver, manganese, arsenic, calcium and magnesium occur throughout the area. Site 1963 returned highly anomalous values of silver (2.82 ppm), tungsten (17.42 ppm), scandium (44.5 ppm), molybdenum (19.5 ppm) and cadmium (25.8 ppm). One anomalous value of 13 ppb gold occurs in a lake to the south of Silk Lake. The gold anomaly occurs near a mapped mafic-felsic metavolcanic rock contact along a major ductile shear zone (Sage 1998) and (Percival and Stott 2000).

The anomalous values in the Silk Lake area continue further east towards Obonga Lake. The anomalies follow the older metavolcanic rock unit along the southern contact of the Obonga Lake greenstone belt. Although no felsic metavolcanic rocks are known from the area, portions of the older metavolcanic unit disappear below the diabase sills. Anomalous to highly anomalous Zn, Ni, Cu, As, Cr, Co and Ca occur along this trend. The presence of favourable geology and anomalous Cu, Zn, Ni and Ag, makes the entire portion of the older metavolcanic unit a prospective area for potential massive sulfide mineralization. The gold anomaly located south of Silk Lake should be treated with some caution because there are no known gold occurrences in the area and this is the only significant lake sediment gold anomaly in the vicinity. As of February 2000, the ground was open for staking.

Area 10: Obonga Lake; Ni, Cu,

The anomalous area is located south of Western Bay and includes a linear string of approximately 6 lakes. The anomalies follow the contact between Archean felsic intrusive rocks and mafic to intermediate metavolcanic rocks of the Obonga Lake greenstone belt (Sage 1998). Most of the area is overlain by diabase sills. Several lakes in this area contain anomalous to highly anomalous values of copper, nickel, arsenic, chromium, cobalt, REEs, iron and manganese. Single element anomalies include gold, silver and zinc. A weak gold value of 6 ppb occurs in a small lake at the southern end of the anomalous trend. Four other lakes in the area contain similar low gold values of 4 ppb. Many of the lakes along this trend are deep and contain anomalous iron and manganese concentrations. These may be false anomalies.

Area 11: Scalp Lake; Ni, Cu, Au, W

A cluster of 9 lakes located northwest of the Awkward Lake mafic stock contain anomalous to highly anomalous nickel, copper, gold and tungsten. These lakes are also elevated in light rare earth elements, Ag, S, Mo, Rb, Tl, Tm, Sr, Th, Y and Yb. The Awkward Lake mafic stock is crudely zoned with an outer gabbroic phase and a more anorthositic core (Sage 1998). Four of the lakes in the area contain elevated to weakly anomalous gold values of 6 and 5 ppb in addition, 2 lake samples yielding 4 ppb gold. Highly anomalous values of 73.7, 64.4 and 244 ppm Cu were returned from Scalp Lake and the northern end of Awkward Lake. A string of lakes trending southeast from Scalp Lake toward the centre of the Awkward Lake stock contain elevated to anomalous values of W and REEs. A small lake in the centre of the Awkward Lake Intrusive (site 1792), contains highly anomalous values for silver (41.01 ppm), cadmium (120.6 ppm), cesium (144.26), lithium (630.4 ppm), molybdenum (201.4 ppm), lead (1159.4 ppm), thallium (41.39 ppm), uranium (192.97 ppm), tungsten (31.19 ppm), ytterbium (228.63 ppm) and various rare earth metals. Many of these values are the highest assays recorded from the Garden-Obonga survey area. A small pyrite, pyrrhotite, chalcopyrite showing is located immediately south of this lake. The presence of Ni, Cu and gold located along the contact of the Awkward Lake Stock, makes this a potential area for Au-PGE-Ni-Cu mineralization associated with gabbroic/anorthositic rocks. The southeast trend of elevated elements from the Scalp Lake area into the central portion of the Awkward Lake Stock may indicate that a pegmatitic rock and/or structure is present in the area. As of February 2000, some of the area was open for staking.

Area 12: Tommyhow Lake; Cu, Zn, Pb

The general geology of the Tommyhow Lake area consists of felsic metavolcanic and pyroclastic rocks interfingering with metasedimentary rocks (Sage 1998). A few lakes contain elevated to highly anomalous values of zinc, copper, lead and silver in a widely scattered area covering most of the felsic metavolcanic rocks. Some clustering of values is evident along the southern contact with the granitoids and to the north along the mafic-felsic metavolcanic contact. The highest zinc value for this area (210 ppm) occurs in a lake sediment site at the northern contact of the mafic-felsic unit. This zinc value was sampled from a deep lake that contained elevated iron and manganese. The base metal values from this lake may be related to preferential scavenging of elements in anoxic conditions and not directly related to a bedrock source. The same lake also contains highly anomalous REEs.

A string of lakes to the south contain 1 highly anomalous and 2 elevated values of REEs. The anomalous REEs in the area may suggest possible hydrothermal alteration in the felsic metavolcanic rocks. Elevated REEs occur in lake sediments associated with hydrothermal alteration at the Winston Lake volcanogenic massive sulfide deposit (Dyer 1997). One soil and 9 bedrock samples were collected from a gossanous shear zone located north of Tommyhow Lake (Figure 2). The zone contained sheared and altered felsic metavolcanic rocks or siliceous metasediments with trace amounts of chalcopyrite and pyrite (Dyer 1998). All of the bedrock samples contained very low values for base and precious metals. The highest gold value from the bedrock sampling was 40 ppb. The soil sample (site 4006) collected near the shear zone contained low values of 17 ppb Au, 50 ppm Cu and 88 ppm Zn.

Area 13: Kashishibog Lake: REE, U, Y, Zn, Ti

Along the northern end of Kashishibog Lake an elongate trend of lakes contain elevated to highly anomalous REEs, Zn, Y, U, Yb, Th, Li, K, Fe, Ce and Ti. Some of these lakes also contain elevated Cu, Pb, W, Cr and Mo. The bedrock geology of the area is mapped as diorite-monzodiorite-monzonite and may be related to known sanukitoid rocks that occur in the Sturgeon-Savant Lake area and the Roaring River complex (Stern et al. 1989).

Area 14: Bilkey Lake: Zn, Ti, Cr

Elevated to anomalous values for Zn, Ti and Cr occur in a wide area northeast of Bilkey Lake. A few scattered, elevated to anomalous values of Cu, Y, REEs, Ni, Pb, V and W are found in some lakes.

Stream sediment site 452 contains anomalous chromium, nickel, iron and scandium. The site is about 4 km southeast of Bilkey Lake and corresponds to a known mafic-ultramafic intrusion (Stern et al.1989). Stream sediment site 3019, located to the west of Bilkey Lake contains anomalous Cr, Cu, Ag, Mg, Ti and REEs. Some of the clustering of anomalous values corresponds to known mafic-ultramafic intrusives of the Roaring River Complex (Stern et al. 1989). A weak linear trend of anomalies occurs to the southeast of Bilkey Lake. These anomalies trend southwest and follow a large scale structure as well as an esker system. The linear trend of anomalies along this structure suggest a possible bedrock source related to the Roaring River Complex. As of February 2000, the area was open for staking.

Area 15: Allely Lake; REE, Ti, V, W, Y

The area to the south of Allely Lake has a cluster of lakes containing elevated to anomalous Ti, Mo, REEs, Y, V, W, Fe, Zn, Ag, Pb, Ce and Cs. A few of the lakes also contain elevated Cu, Mg and Cr. The QC data indicates that the titanium analyses from this area contain analytical drift and may be spurious. The bedrock geology is mapped as part of the Roaring River Complex (Stern et al. 1989). Sanukitoid and mafic-ultramafic rocks are known from the Alley Lake area. As of February 2000, the area was open for staking.

Area 16: North Pakashkan Lake; Pb, Ag, Mo, W

A cluster of 5 lake sediment sites from the northeastern end of Pakashkan Lake returned numerous elevated to anomalous elements. Silver returned highly anomalous values of 5.14, 5.21, 6.05, 10.04 and 11.77 ppm. Lead values from the 5 sites are also highly anomalous ranging from 12.9 to 21.68 ppm. Tungsten values range from 6.92 to 23.36 ppm and molybdenum values range from 8.6 to 14 ppm. All of these values are above the 99th percentile for their respective elements. Two sites contain extremely high chromium values of 373 and 457 ppm. Nickel values for the 5 sites are elevated to anomalous. Several other elements are highly anomalous from these 5 sites and include: Cd, Cs, Dy, Er, Eu, Li, Lu, Rb, Sc, Tl, Tm and Yb. The bedrock geology is mapped as diorite to synodiorite (Sage 1998). As of February 2000, the area was open for staking.

Area 17: Weaver Lake; V, W, REEs

A southwest linear trend of anomalies is shown on the proportional dot maps in the Weaver Lake area. Anomalous to highly anomalous

values for V, W, REEs, Y, Cr and Fe occur in several lakes in the area. Single lake sediment sites with elevated to anomalous values include Cu, Ni, Ag, Ti, Mo, Mn and Zn. The anomalous elements overlie an esker complex and glaciofluvial outwash plain deposits. It is possible that the responses are due to the Quaternary cover in this area, although, some of the values are higher where lakes are proximal or overlie the metavolcanic rocks of the Garden Lake greenstone belt. The anomalous trend of REEs in the area may be related to a possible bedrock structure.

Area 18: South Pakashkan Lake; Ti, W, V

The area is covered by glaciofluvial sands and gravels of the Lac Seul Moraine. The bedrock geology is interpreted as Archean migmatitic rocks (Sage 1998). Elevated to highly anomalous values of Ti, W and V occur in a cluster of lakes located to the south of Pakashkan Lake. Scattered values of elevated Cr, Mo, Pb and As occur throughout the area. Quality control problems indicate that the titanium values are spurious in this area.

CONCLUSIONS

The preliminary results and interpretations discussed in this report have identified a number of base and precious metal exploration targets. The target areas contain multi-element anomalies and are considered priority areas for further exploration. In addition, there are a number of single element anomalies throughout the survey area. The single element anomalies may warrant further investigation, especially if they occur in areas of favourable geology or known mineralization.

ACKNOWLEDGEMENTS

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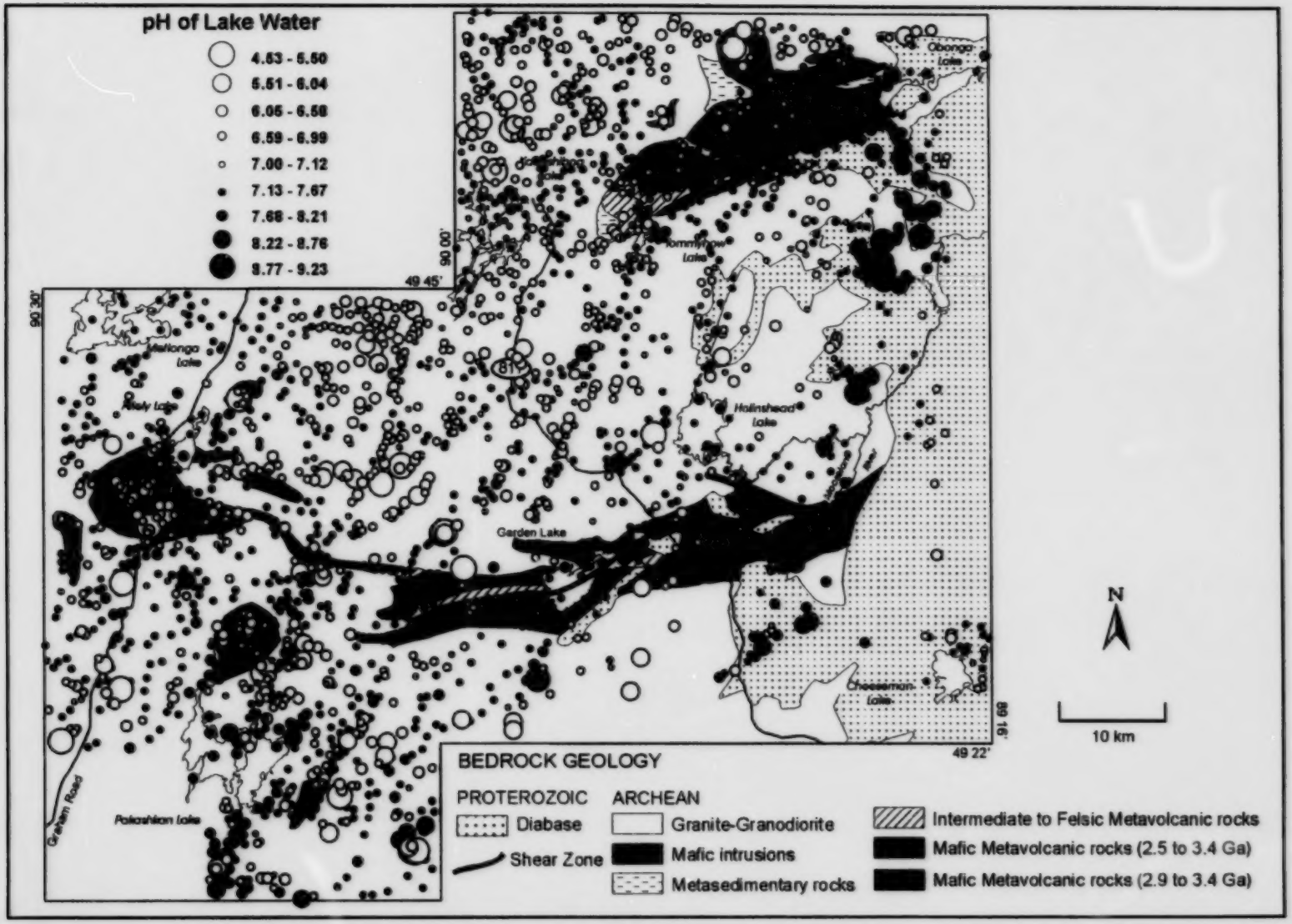
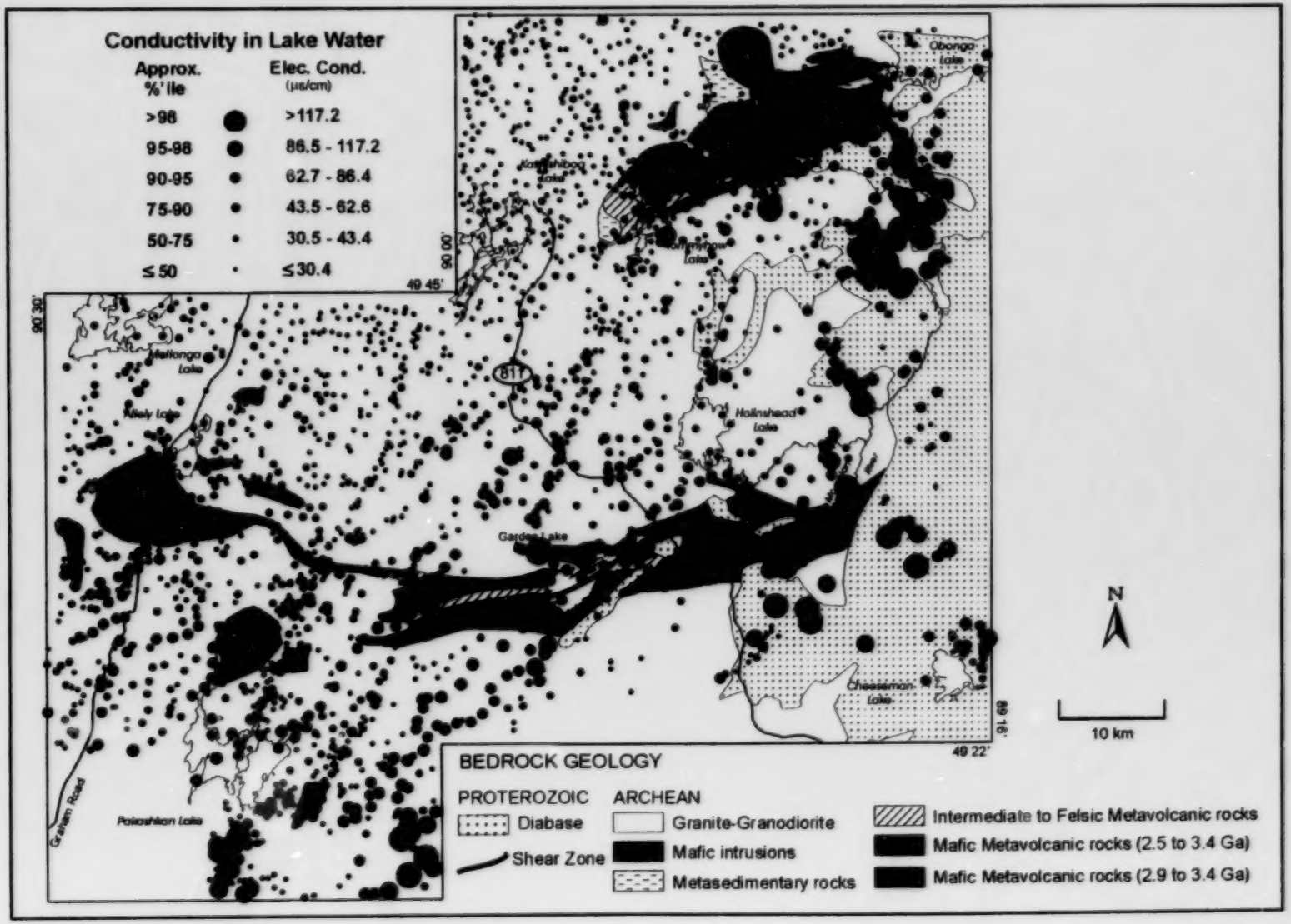
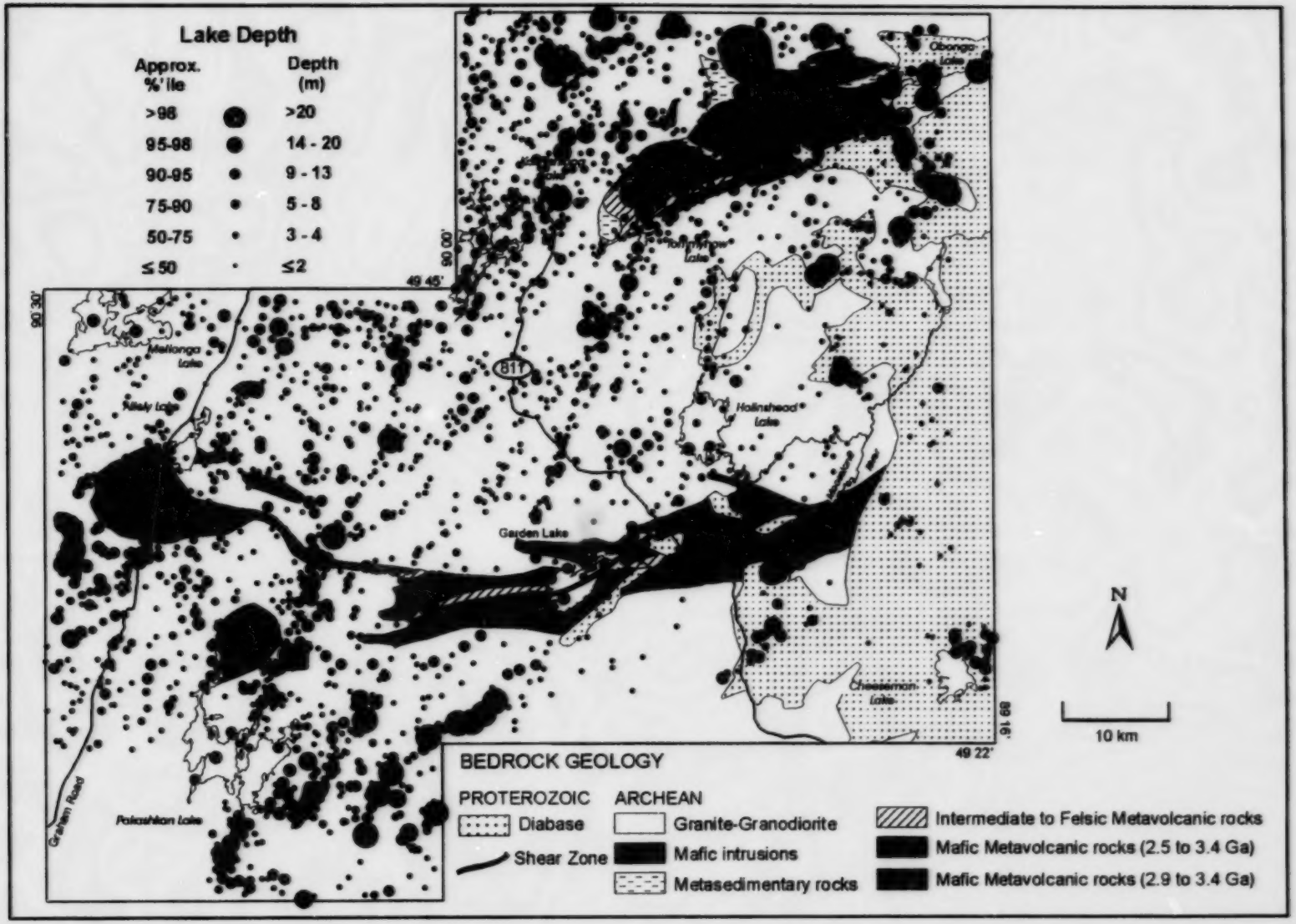
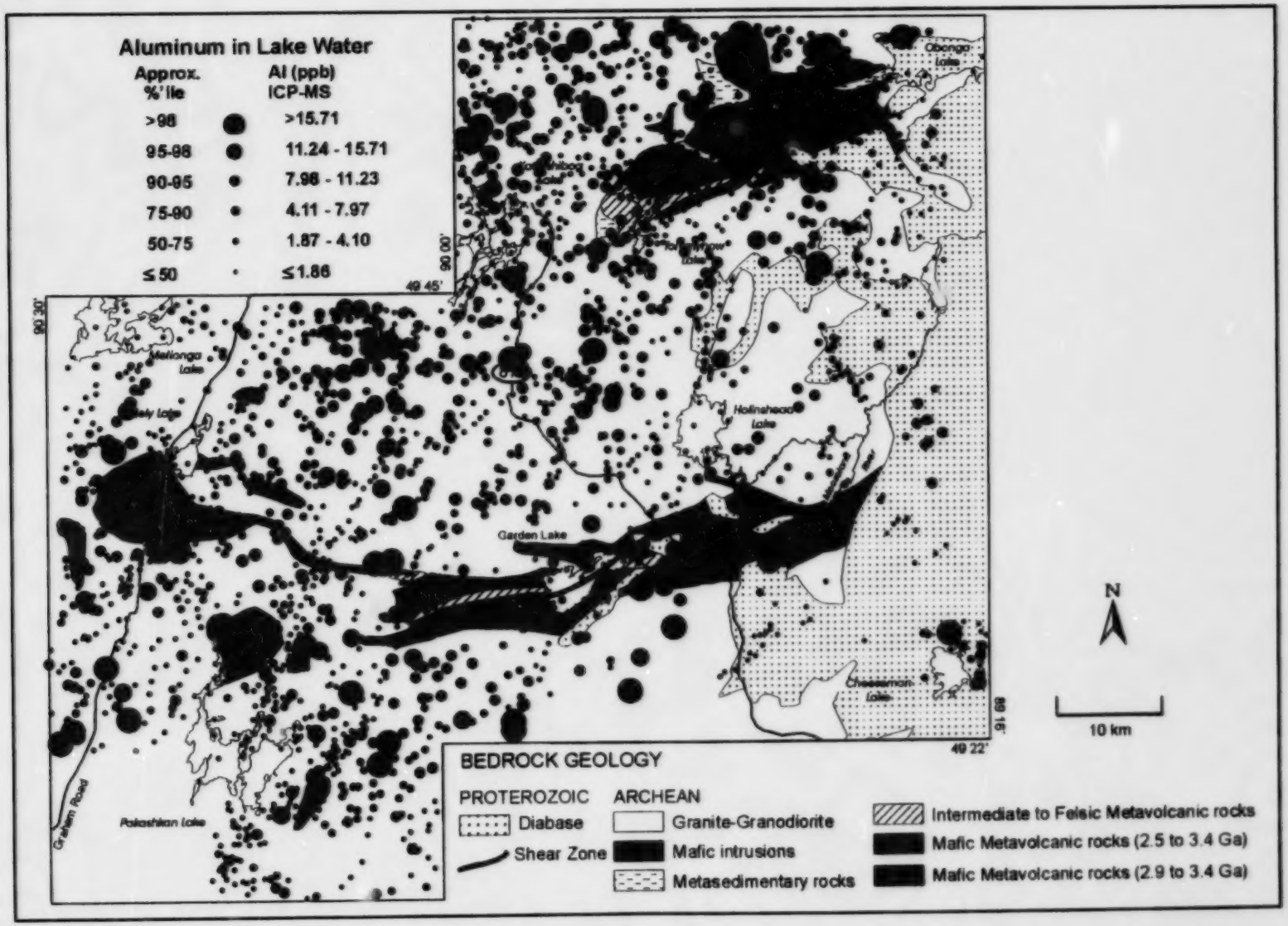
APPENDIX A

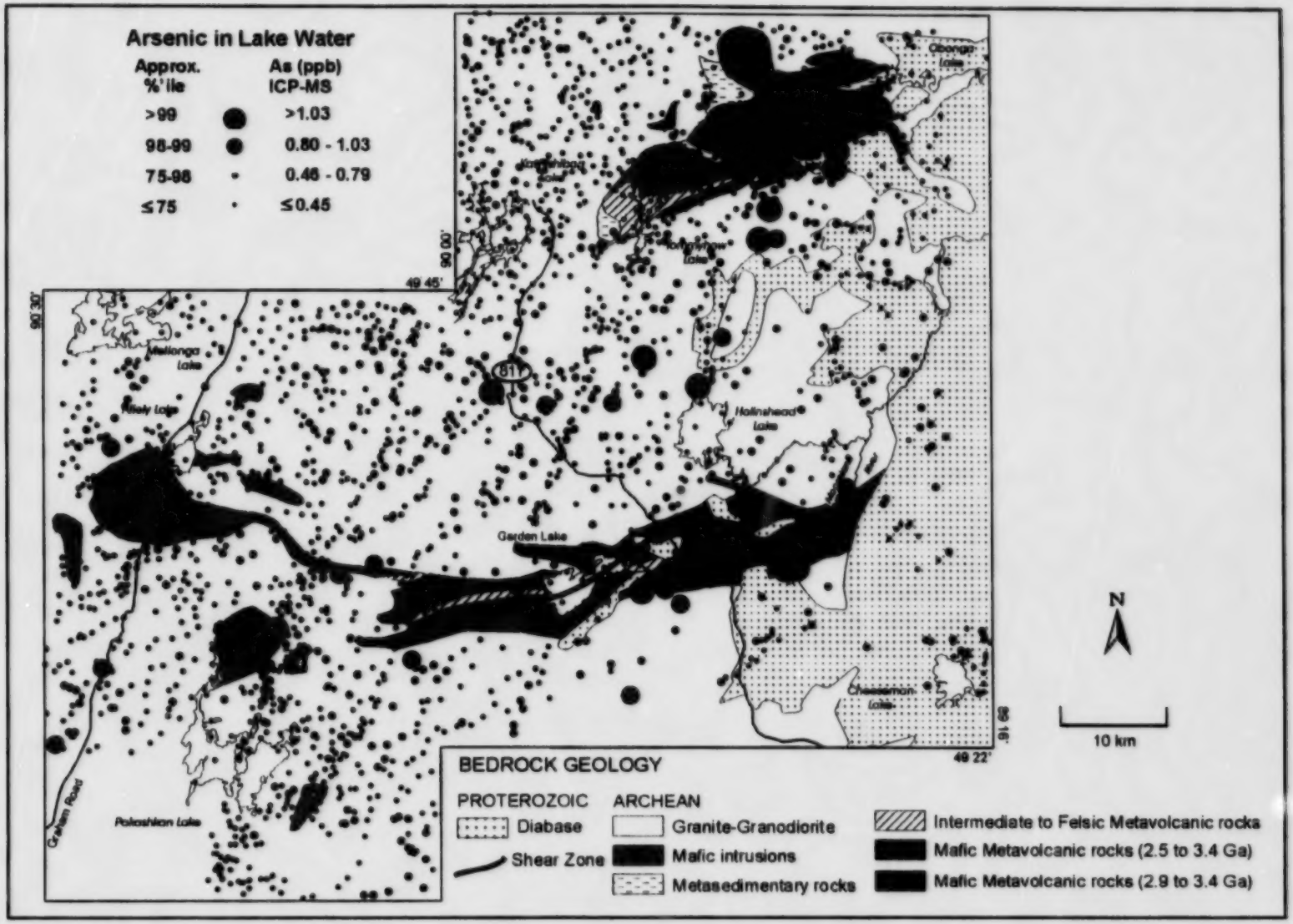
Proportional dot maps of pH, conductivity, lake depth, Al, As, Ca, Ce, Cr, Ni, U and Yb in lake waters.

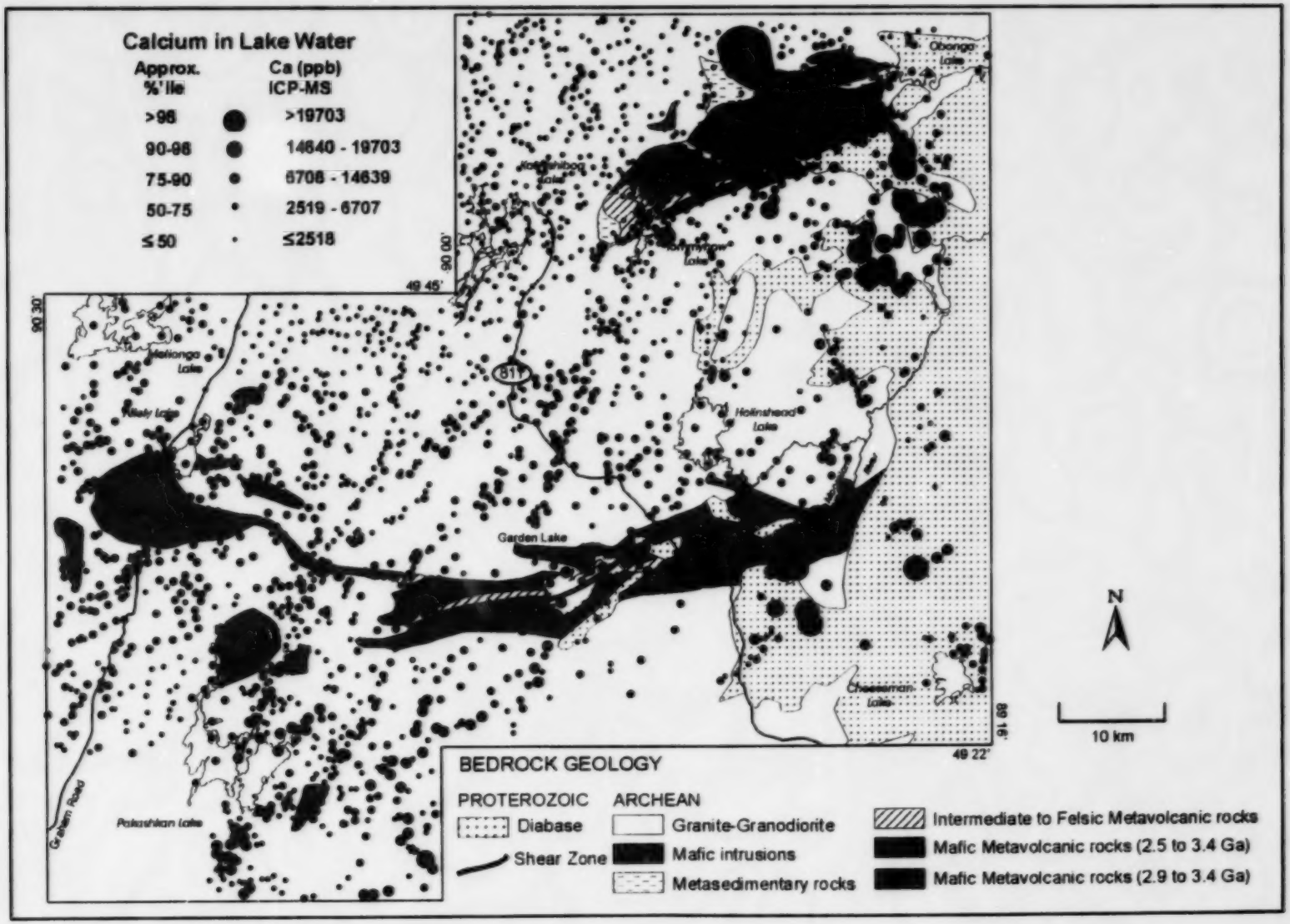

pH of Lake Water
4.63 - 5.50
5.51 - 6.04
6.05 - 6.58
6.59 - 6.99
7.00 - 7.12
7.13 - 7.67
7.68 - 8.21
8.22 - 8.76
8.77 - 9.23
90 30'
90 00'
49 45'
49 22'
89 16'
Obonga Lake
Tommy Cow Lake
Mallonga Lake
Misty Lake
Hallinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Polashion Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

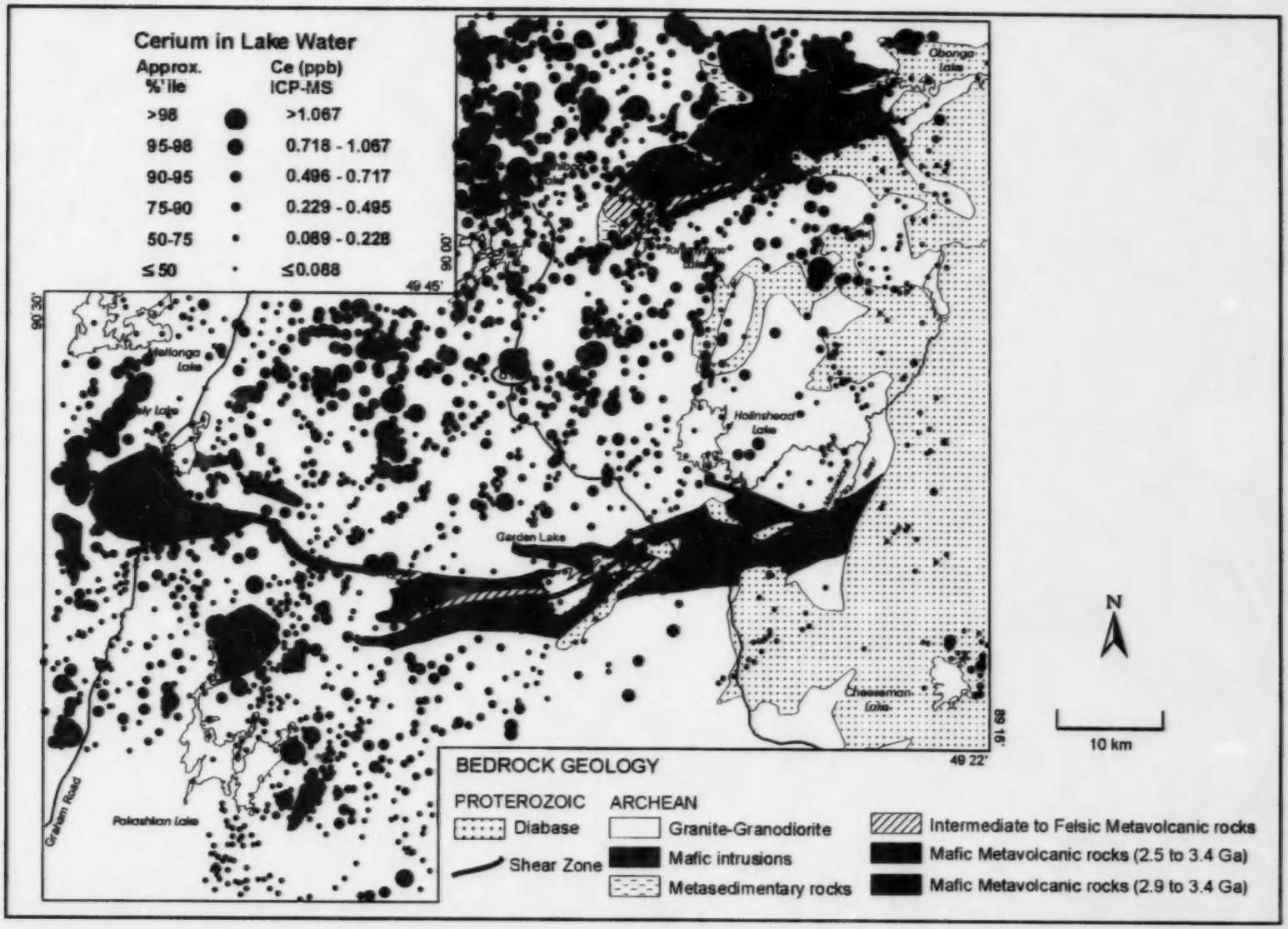

Conductivity in Lake Water
Approx. %'ile
Elec. Cond. (µs/cm)
>98 >117.2
95-98 86.5 - 117.2
90-95 62.7 - 86.4
75-90 43.5 - 62.6
50-75 30.5 - 43.4
≤ 50 ≤30.4
90 30'
90 00'
49 45'
49 22'
89 19'
Obonga Lake
Kawlishbong Lake
Minnow Lake
Hellonga Lake
Kely Lake
811
Hallinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Poloshkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

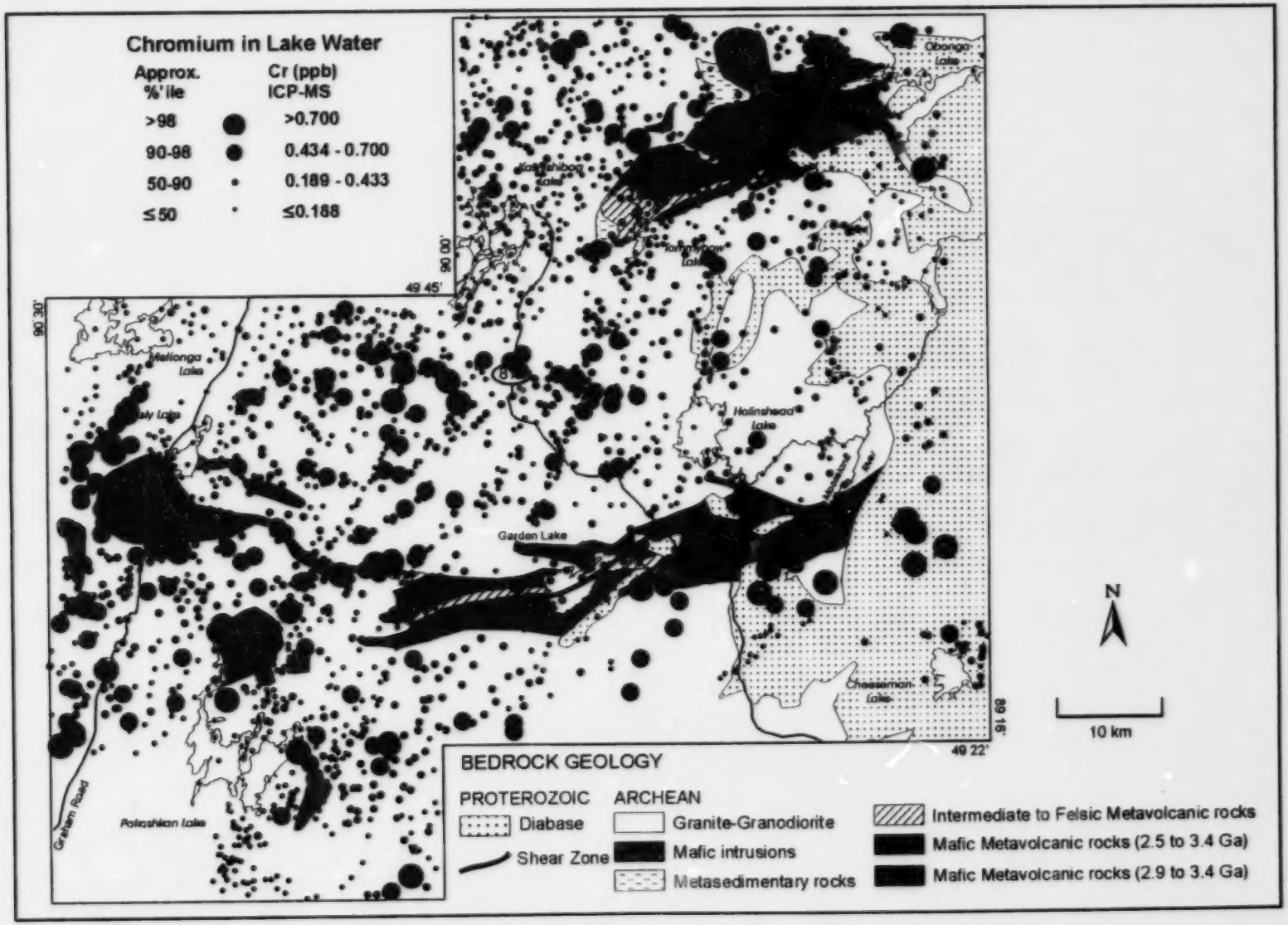

Lake Depth
Approx. %'ile
Depth (m)
>98
>20
95-98
14 - 20
90-95
9 - 13
75-80
5 - 8
50-75
3 - 4
≤ 50
≤2
90 00'
90 30'
49 45'
49 22'
91 69'
Obongo Lake
Mellonga Lake
Kitely Lake
611
Hollinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Palashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

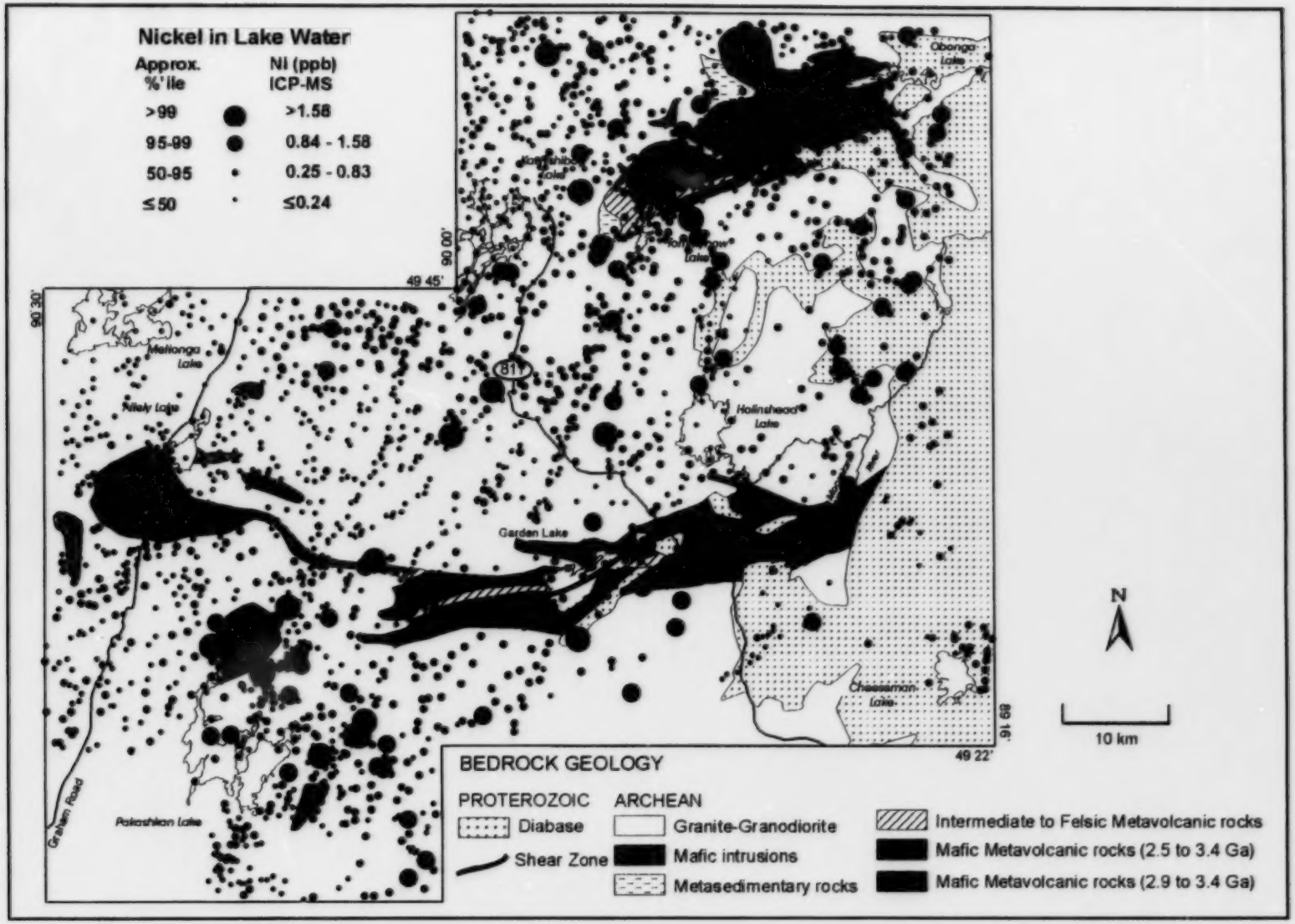

Aluminum in Lake Water
Approx. %'ile
Al (ppb) ICP-MS
>98 >15.71
95-98 11.24 - 15.71
90-95 7.98 - 11.23
75-90 4.11 - 7.97
50-75 1.87 - 4.10
≤ 50 ≤1.86
90 00'
49 45'
90 30'
49 22'
89 15'
Obonga Lake
Meloinga Lake
Holinshead Lake
Garden Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

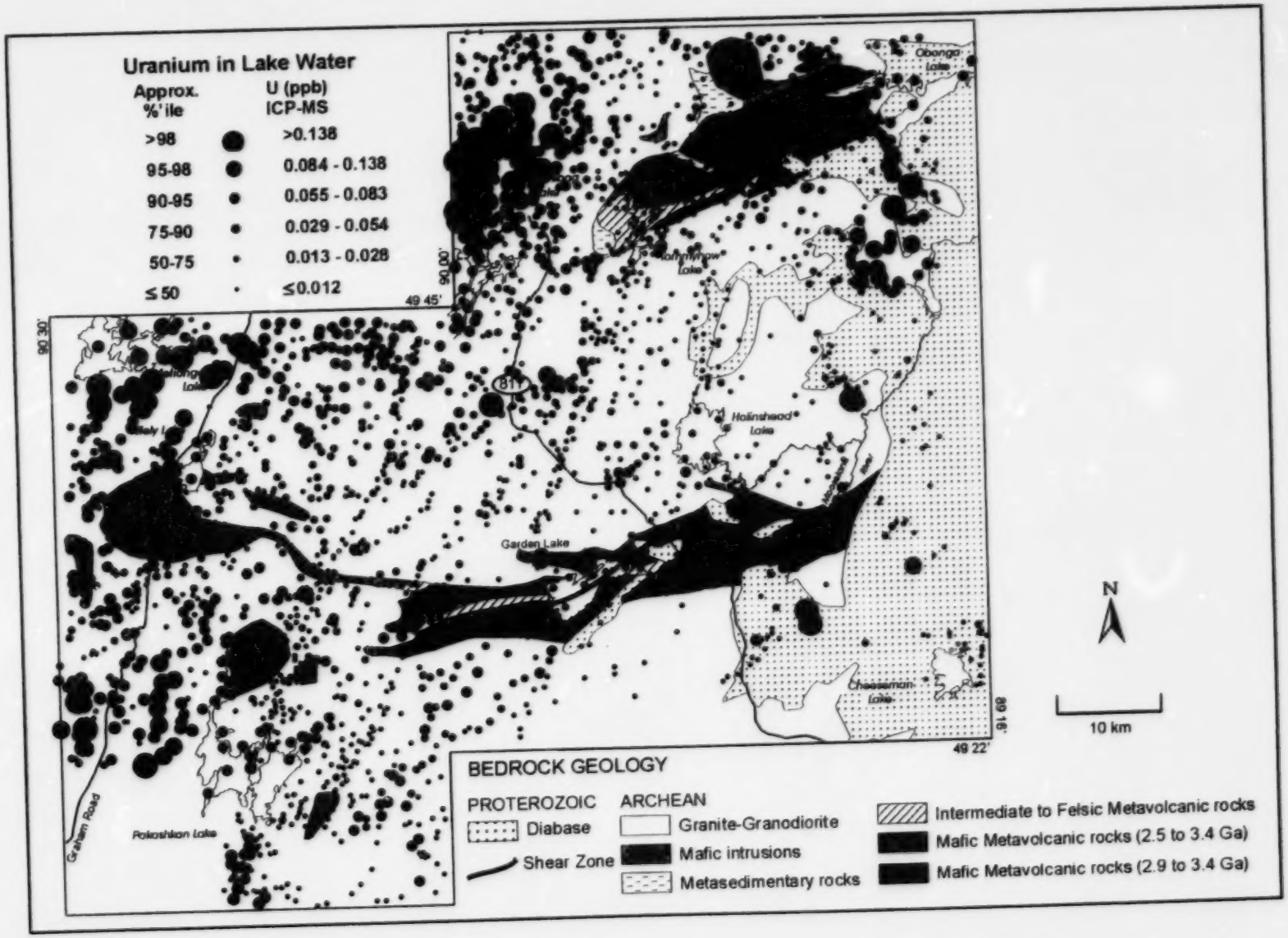

Arsenic in Lake Water
Approx. %'ile
As (ppb) ICP-MS
>99
>1.03
98-99
0.80 - 1.03
75-98
0.46 - 0.79
≤75
≤0.45
90 00'
90 30'
49 45'
49 22'
88 15'
Obonga Lake
Mattonga Lake
Misty Lake
811
Hollinshead Lake
Garden Lake
Chessman Lake
Graham Road
Polashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocka
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

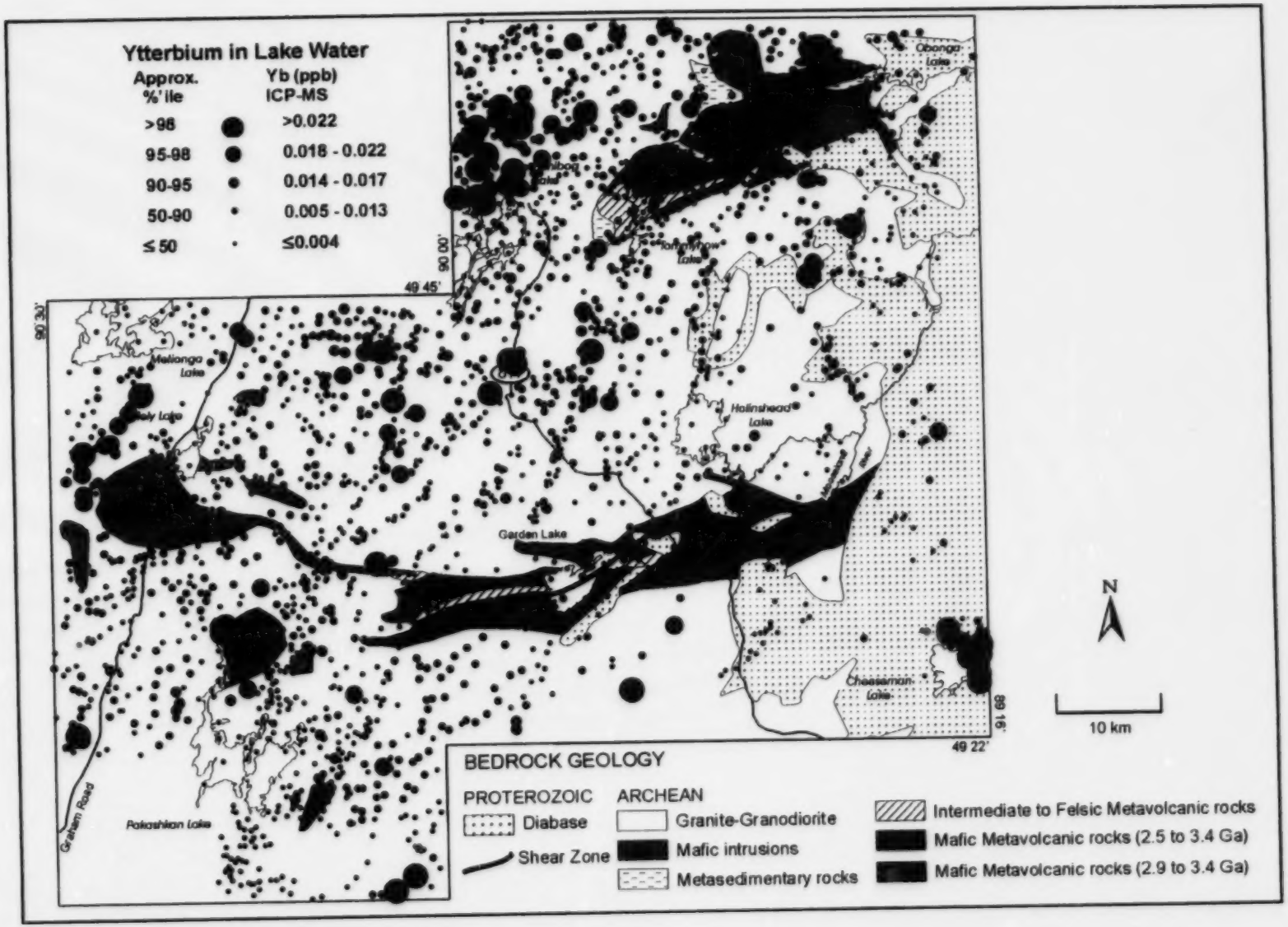

Calcium in Lake Water
Approx. %'ile
Ca (ppb) ICP-MS
>96
>19703
90-96
14640 - 19703
75-90
8708 - 14639
50-75
2519 - 6707
≤50
≤2518
90 00'
90 30'
49 45'
49 22'
89 16'
Obonga Lake
Kawashebog Lake
Melonga Lake
Misty Lake
Holmshead Lake
Garden Lake
Chessman Lake
Pakashkan Lake
Graham Road
811
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Cerium in Lake Water
Approx. %'ile
Ce (ppb) ICP-MS
>98 >1.067
95-98 0.718 - 1.067
90-95 0.496 - 0.717
75-90 0.229 - 0.495
50-75 0.089 - 0.228
≤ 50 ≤0.088
90 00'
49 45'
90 30'
Obonga Lake
Hallonga Lake
Holinshead Lake
Garden Lake
Cheeseman Lake
89 15'
49 22'
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Chromium in Lake Water
Approx. %'ile
Cr (ppb) ICP-MS
>98
>0.700
90-98
0.434 - 0.700
50-90
0.189 - 0.433
≤50
≤0.188
90 00'
49 45'
90 30'
Obonga Lake
Melionga Lake
Holinshead Lake
Garden Lake
Chesterman Lake
89 15'
49 22'
Graham Road
Polashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

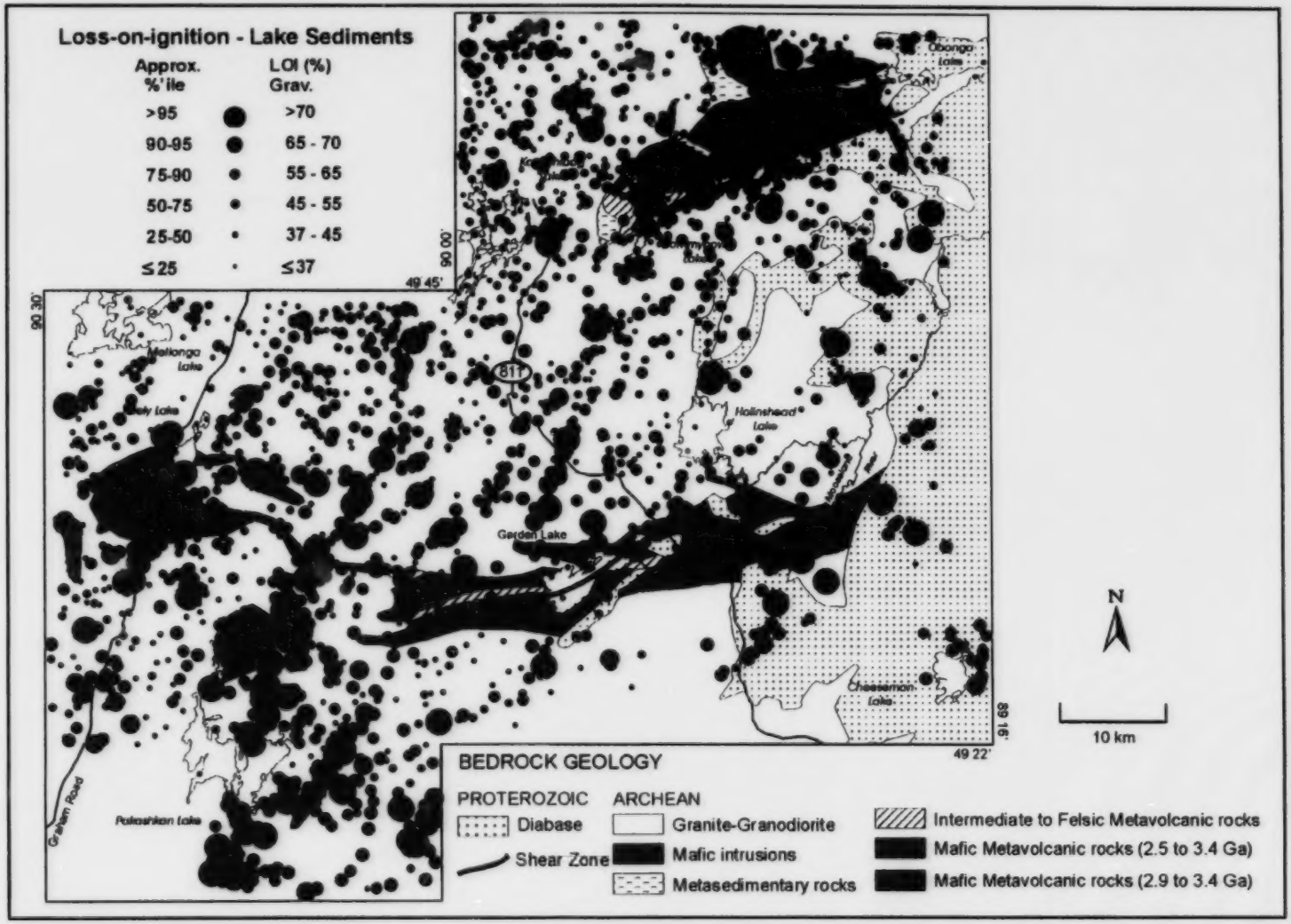

Nickel in Lake Water
Approx. %'ile
Ni (ppb) ICP-MS
>99
>1.58
95-99
0.84 - 1.58
50-95
0.25 - 0.83
≤50
≤0.24
90 00'
49 45'
90 30'
49 22'
89 15'
Obonga Lake
Melonga Lake
Kitely Lake
811
Hollinshead Lake
Garden Lake
Chessman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

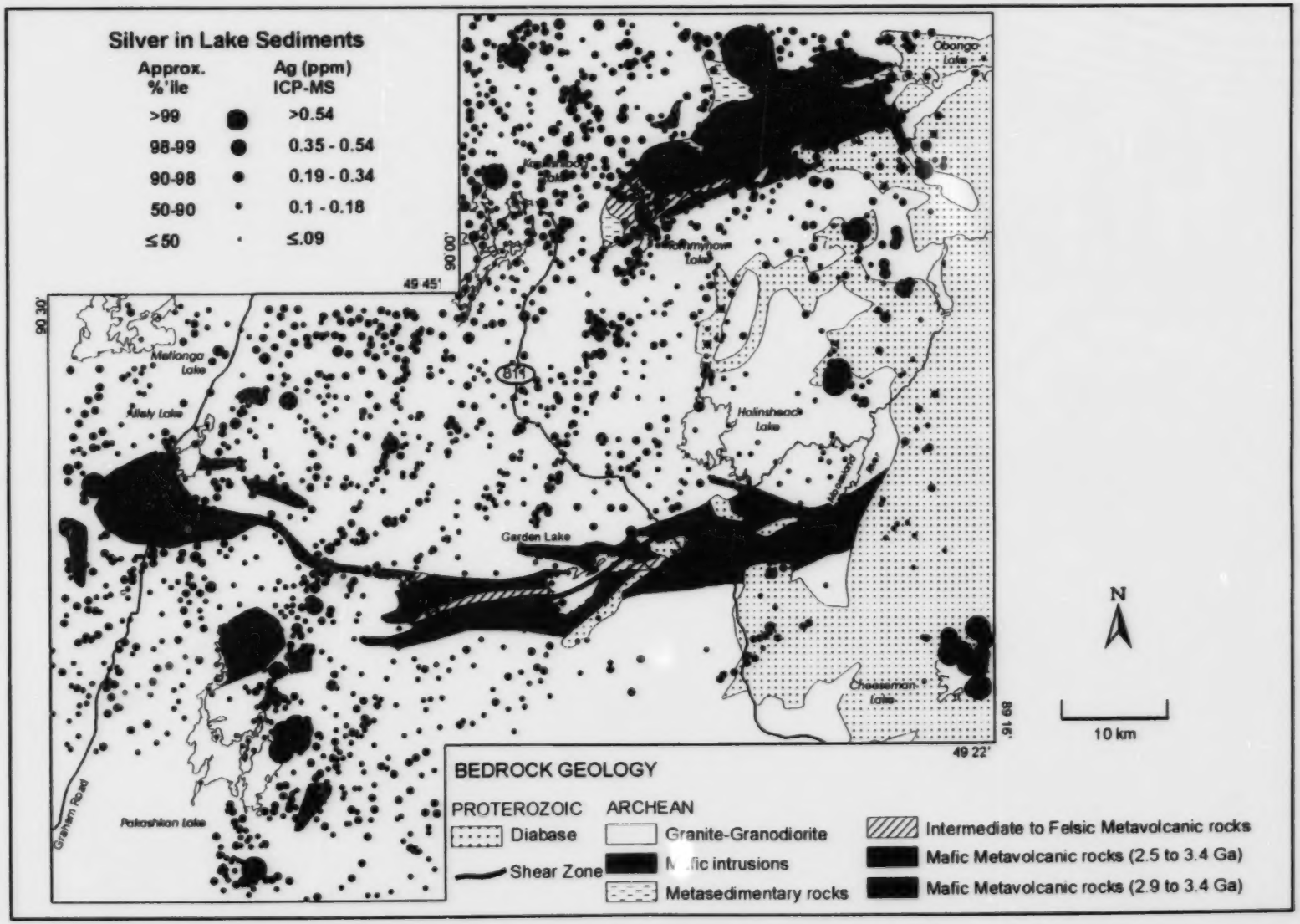

Uranium in Lake Water
Approx. %'ile
U (ppb) ICP-MS
>98 >0.138
95-98 0.084 - 0.138
90-95 0.055 - 0.083
75-90 0.029 - 0.054
50-75 0.013 - 0.028
≤ 50 ≤0.012
90 30'
90 00'
49 45'
49 22'
89 16'
Obonga Lake
Lohmann Lake
Holinshead Lake
Garden Lake
Chesseman Lake
Graham Road
Polashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

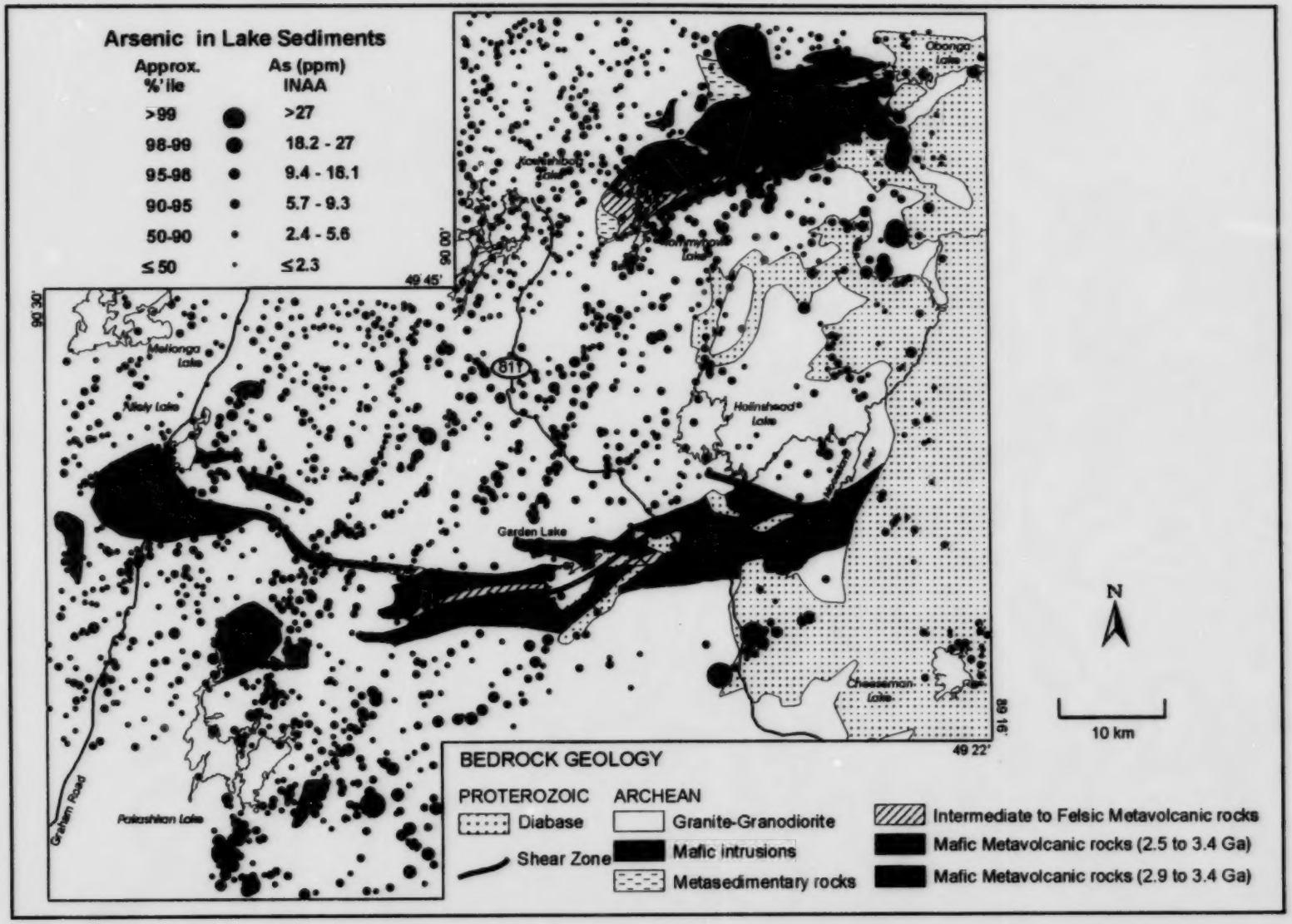

Ytterbium in Lake Water
Approx. %'ile
Yb (ppb) ICP-MS
>98
>0.022
95-98
0.018 - 0.022
90-95
0.014 - 0.017
50-90
0.005 - 0.013
≤ 50
≤0.004
90 00'
49 45'
90 30'
49 22'
88 16'
Oboinga Lake
Meloinga Lake
Holinshead Lake
Garden Lake
Cheeseman Lake
Pakashkan Lake
Graham Road
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

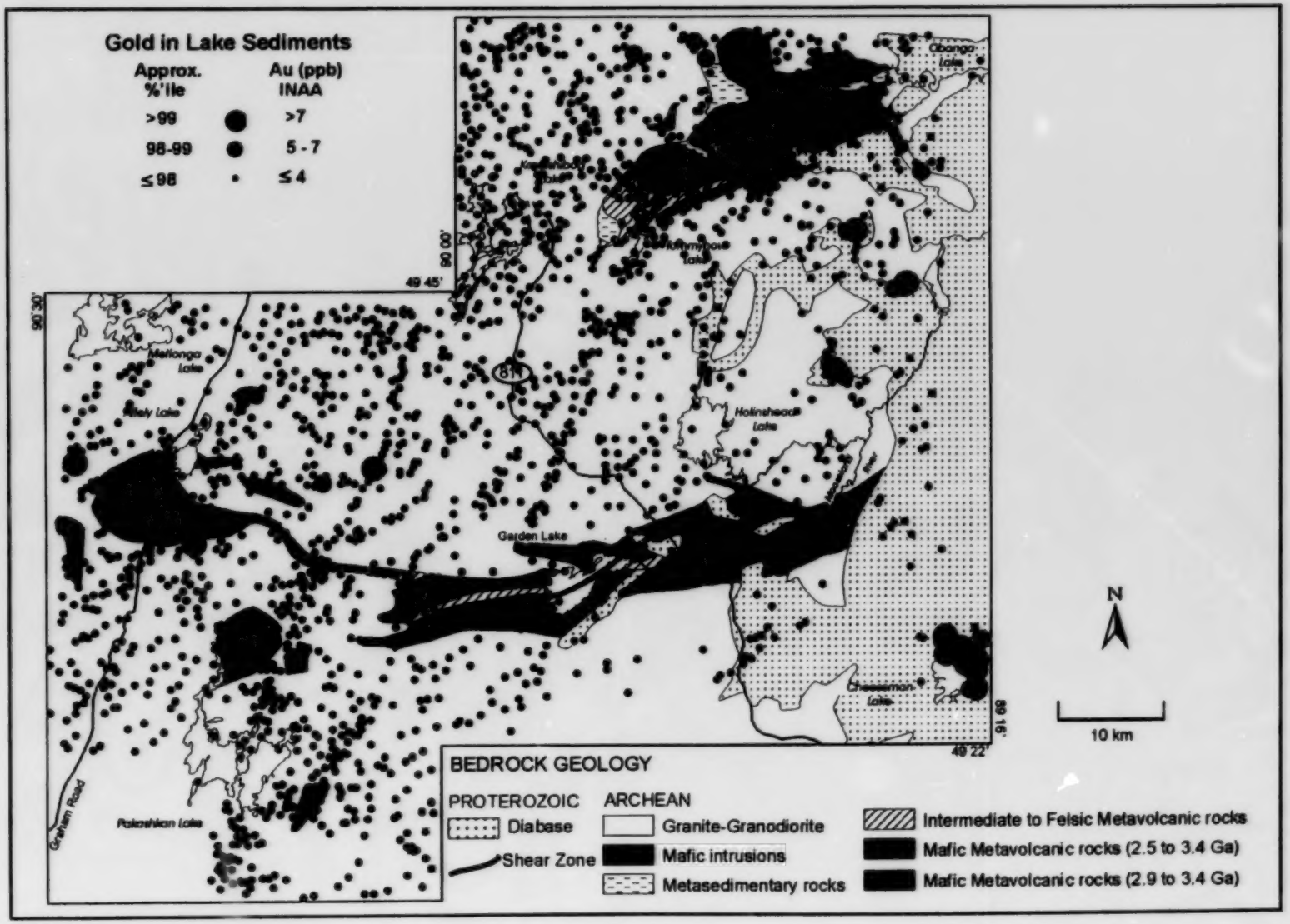
APPENDIX B

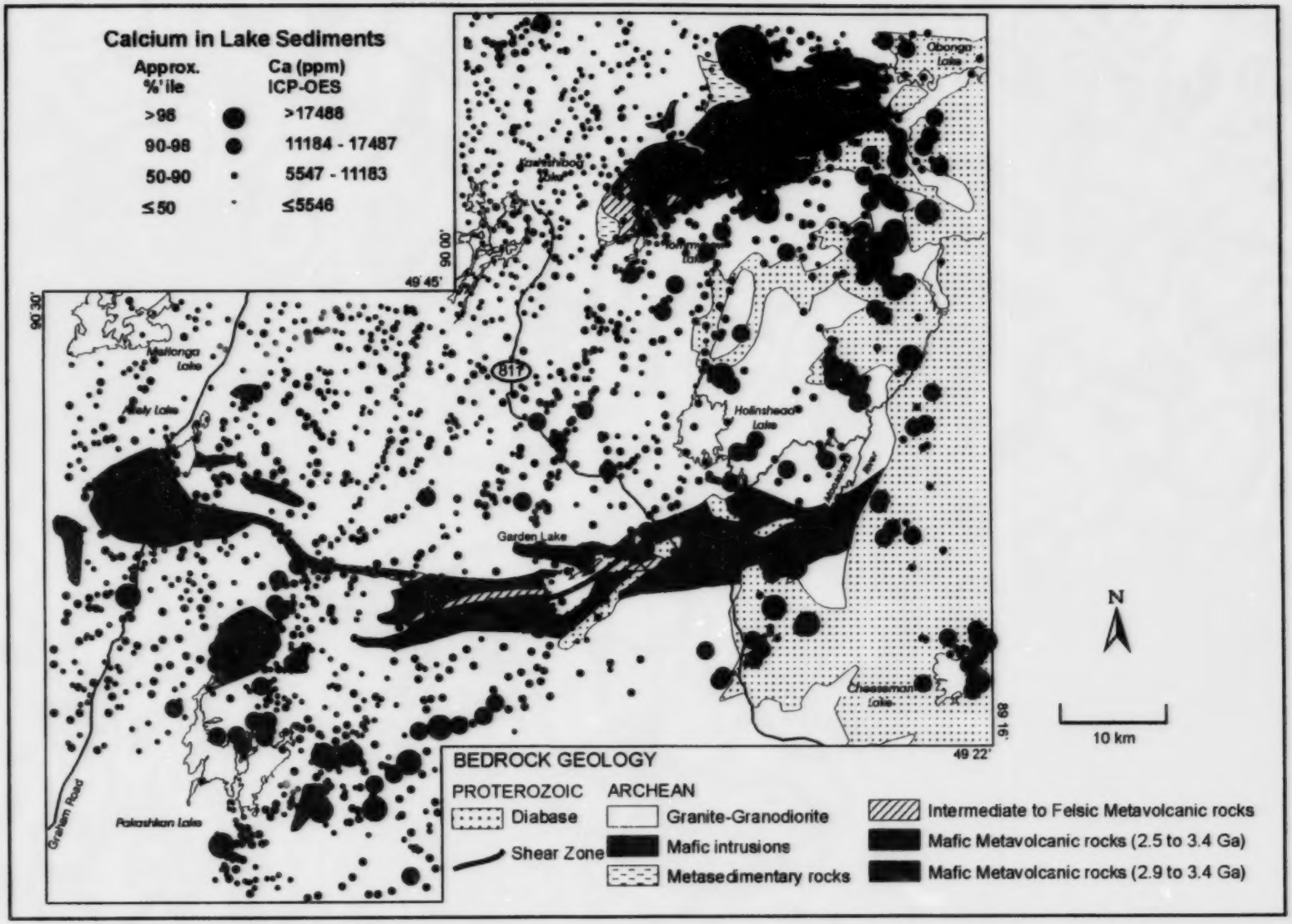
Lake sediment proportional dot maps for LOI, Ag, As, Au, Ca, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Ti, W, V, Y, Zn and Total REE.

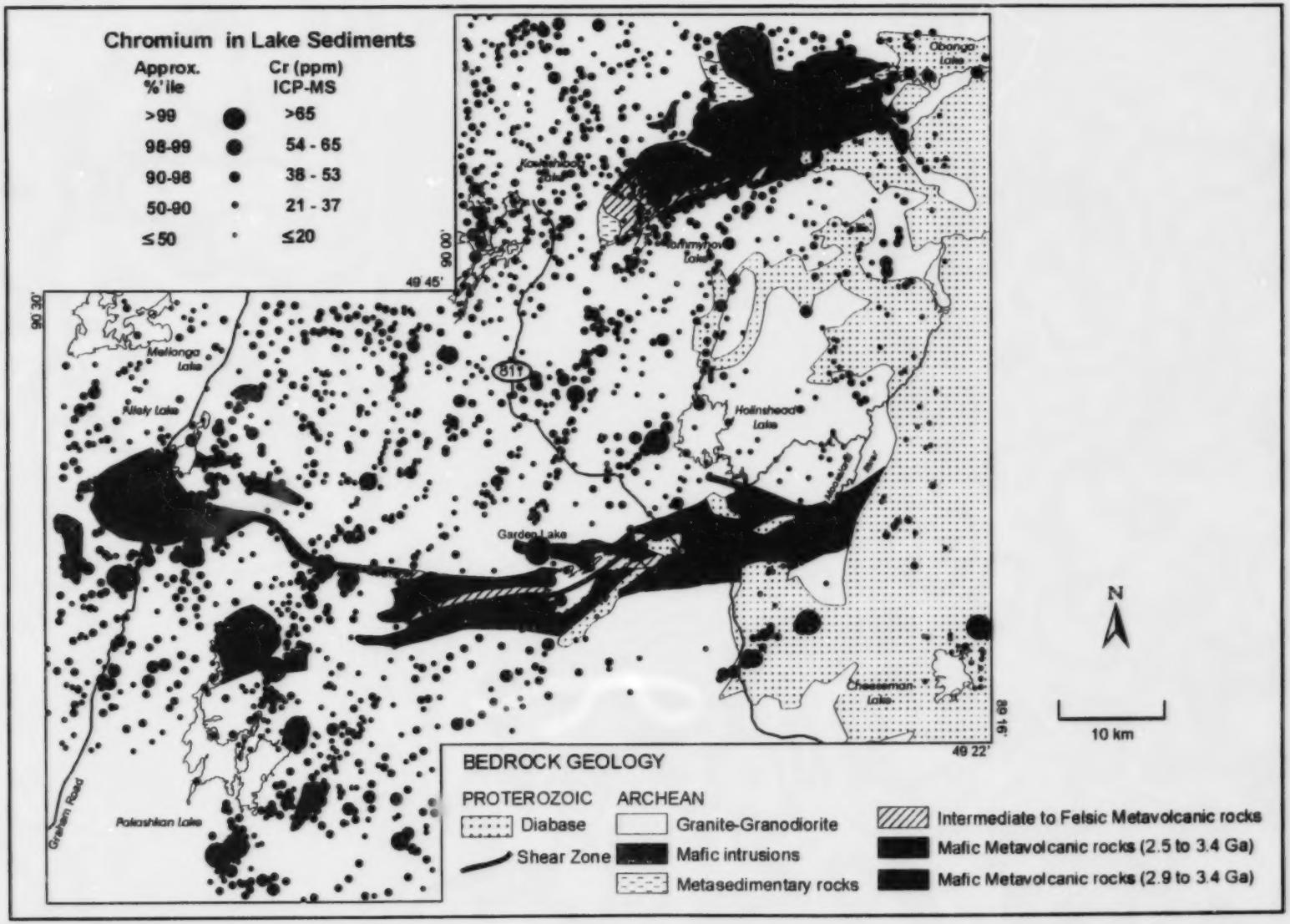

Loss-on-ignition - Lake Sediments
Approx. %'ile
LOI (%) Grav.
>95
>70
90-95
65 - 70
75-90
55 - 65
50-75
45 - 55
25-50
37 - 45
≤25
≤37
90 00'
90 30'
49 45'
49 22'
89 16'
Obonga Lake
Mattonga Lake
Gerden Lake
Hollinshead Lake
Cheesemon Lake
Graham Road
Pakashkan Lake
811
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
ARCHEAN
Diabase
Granite-Granodiorite
Shear Zone
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

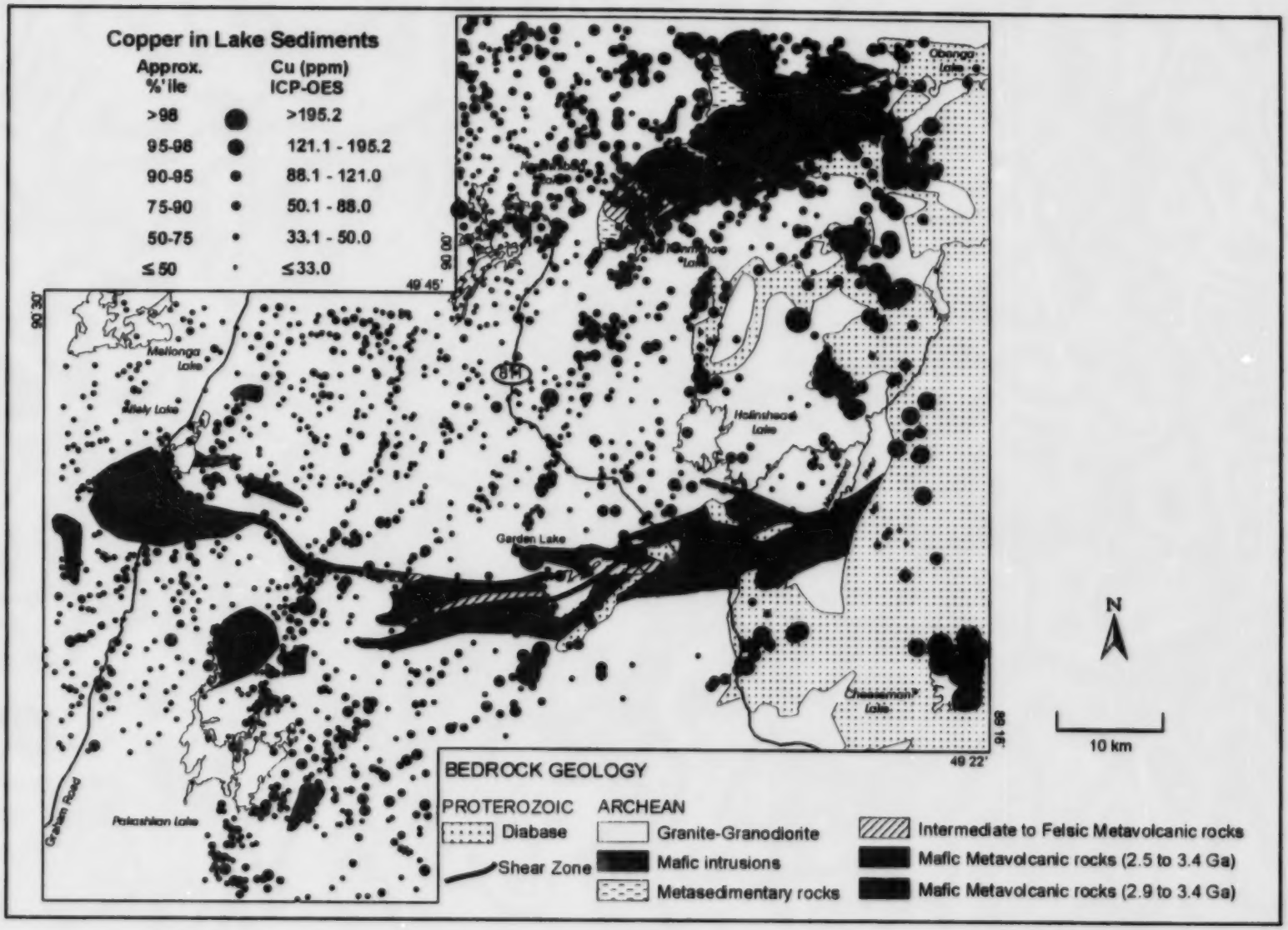

Silver in Lake Sediments
Approx. %'ile
Ag (ppm) ICP-MS
>99
>0.54
98-99
0.35 - 0.54
90-98
0.19 - 0.34
50-90
0.1 - 0.18
≤50
≤.09
49 45'
90 00'
90 30'
89 15'
49 22'
Obonga Lake
Kawashkagama Lake
Whitepine Lake
Mellonga Lake
Kiely Lake
811
Holinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

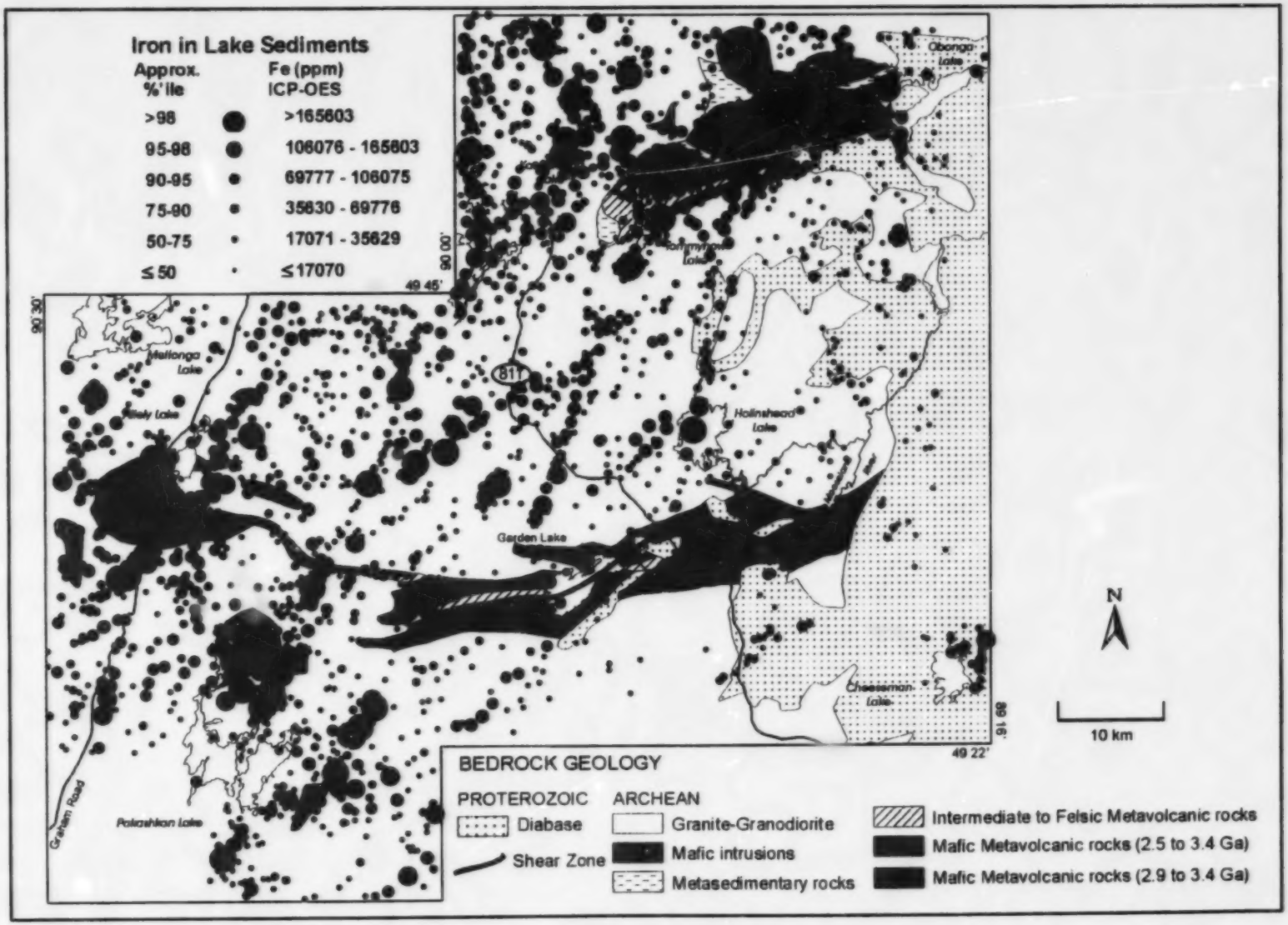

Arsenic in Lake Sediments
Approx. %'ile
As (ppm) INAA
>99
>27
98-99
18.2 - 27
95-98
9.4 - 16.1
90-95
5.7 - 9.3
50-90
2.4 - 5.6
≤ 50
≤2.3
49 45'
90 30'
90 00'
89 15'
49 22'
Obonga Lake
Kawashkagama Lake
Hoffmann Lake
Melonga Lake
Riley Lake
811
Holinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

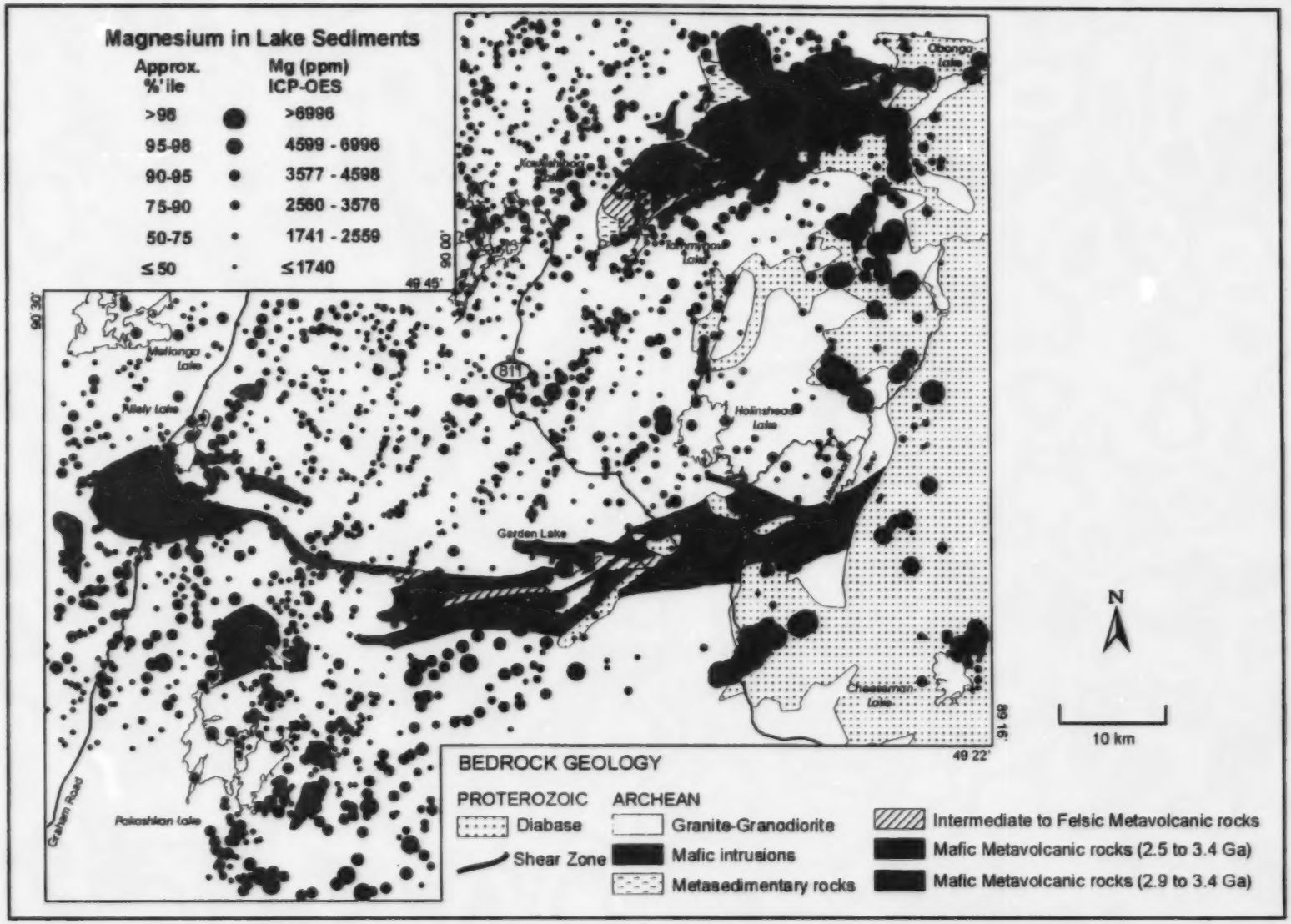

Gold in Lake Sediments
Approx. %'ile
Au (ppb) INAA
>99
>7
98-99
5 - 7
≤98
≤4
90 00'
49 45'
90 30'
Obonga Lake
Kawlinbooi Lake
Kawinipoie Lake
Melonga Lake
Riely Lake
Holinshead Lake
Garden Lake
Chesterman Lake
89 15'
49 22'
Graham Road
Paleshkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

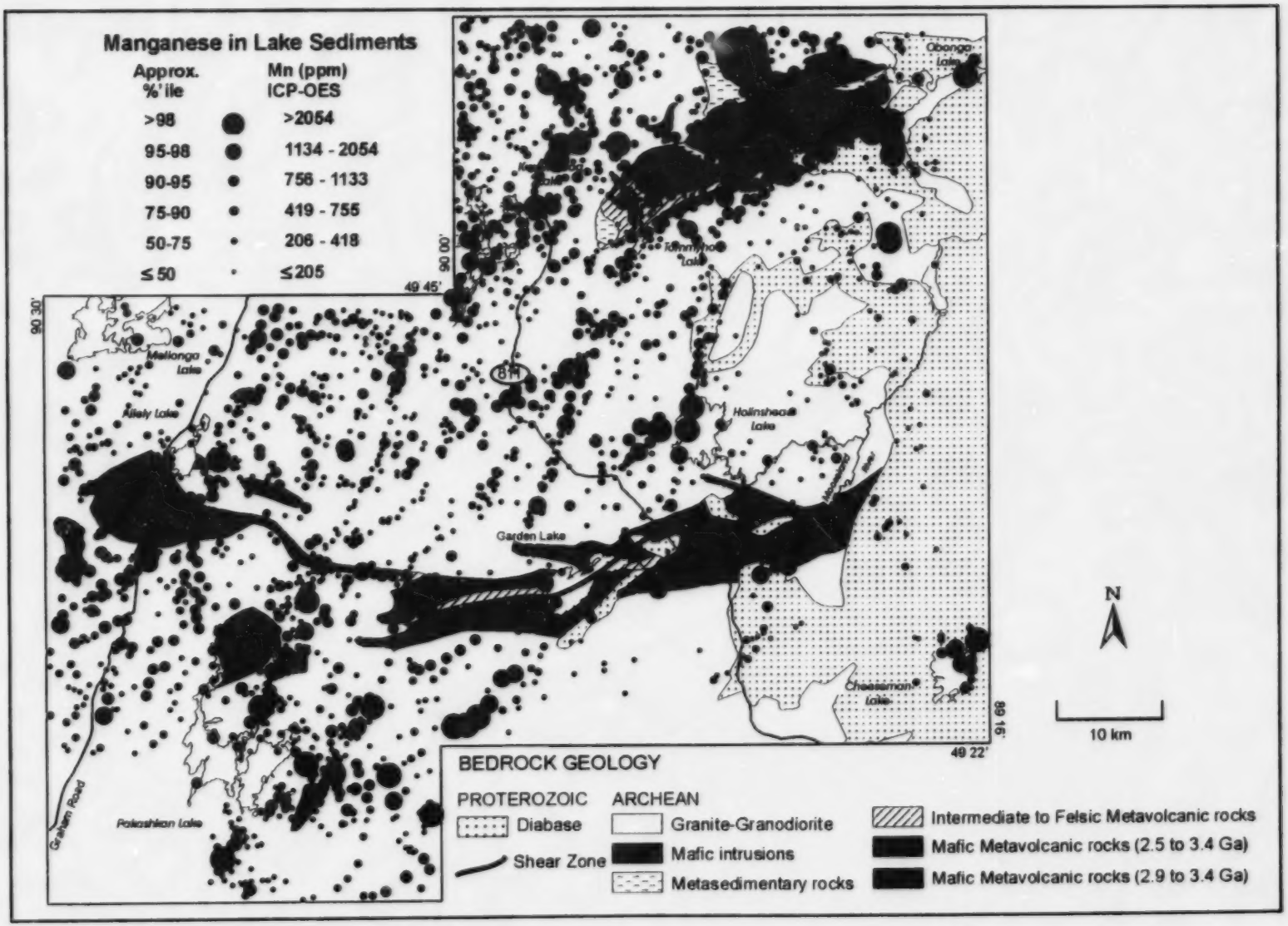

Calcium in Lake Sediments
Approx. %'ile
Ca (ppm) ICP-OES
>98
>17488
90-98
11184 - 17487
50-90
5547 - 11183
≤50
≤5546
90 00'
49 45'
90 30'
49 22'
89 16'
Obonga Lake
Lawrishbod River
Mattonga Lake
Kelly Lake
811
Hollinshead Lake
Garden Lake
Chessman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

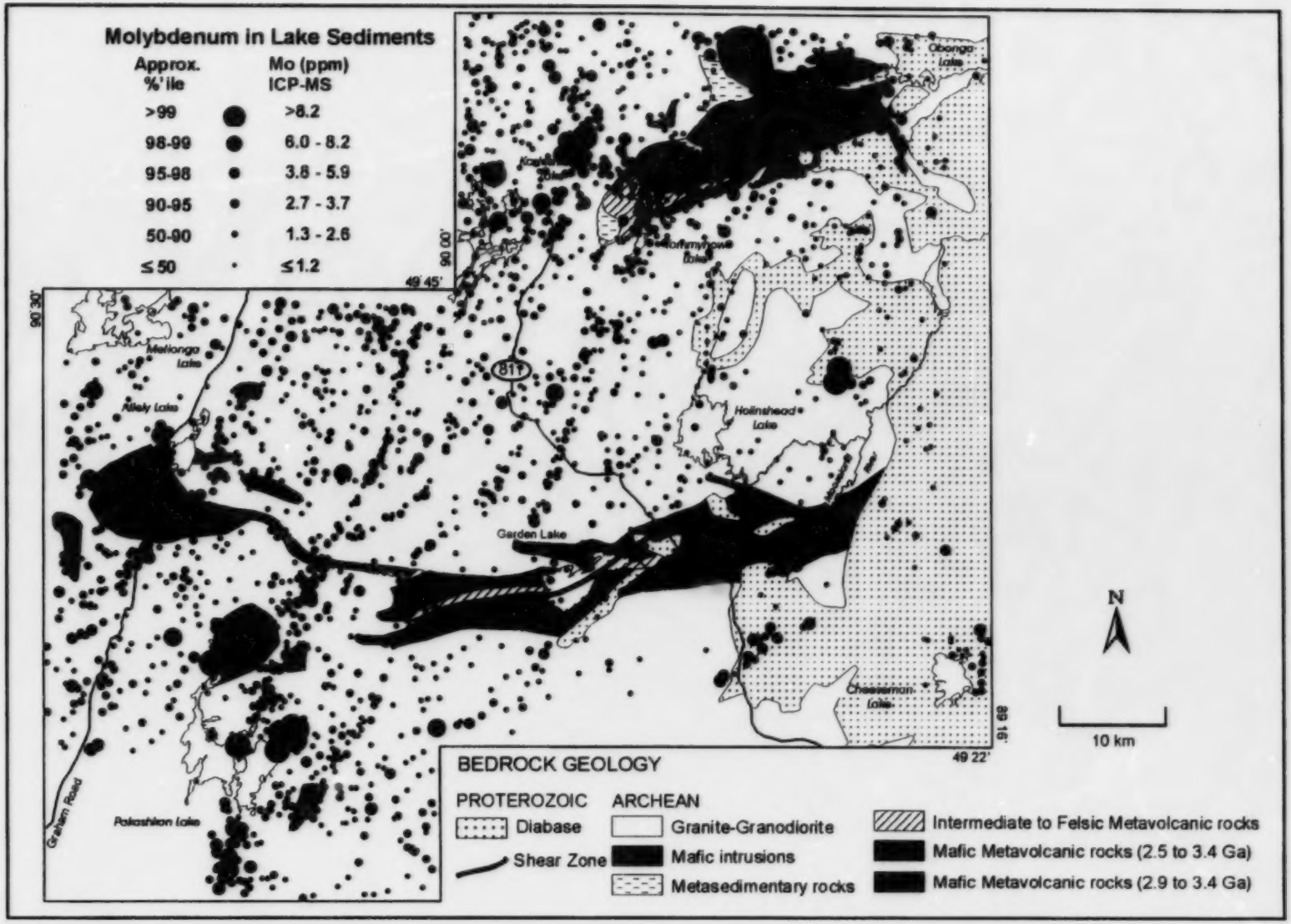

Chromium in Lake Sediments
Approx. %'ile
Cr (ppm) ICP-MS
>99 >65
98-99 54 - 65
90-98 38 - 53
50-90 21 - 37
≤50 ≤20
90 00'
90 30'
49 45'
49 22'
89 16'
Obonga Lake
Kawashada Lake
Hoffmeister Lake
Melonga Lake
Riley Lake
811
Holinshead Lake
Garden Lake
Chesterman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

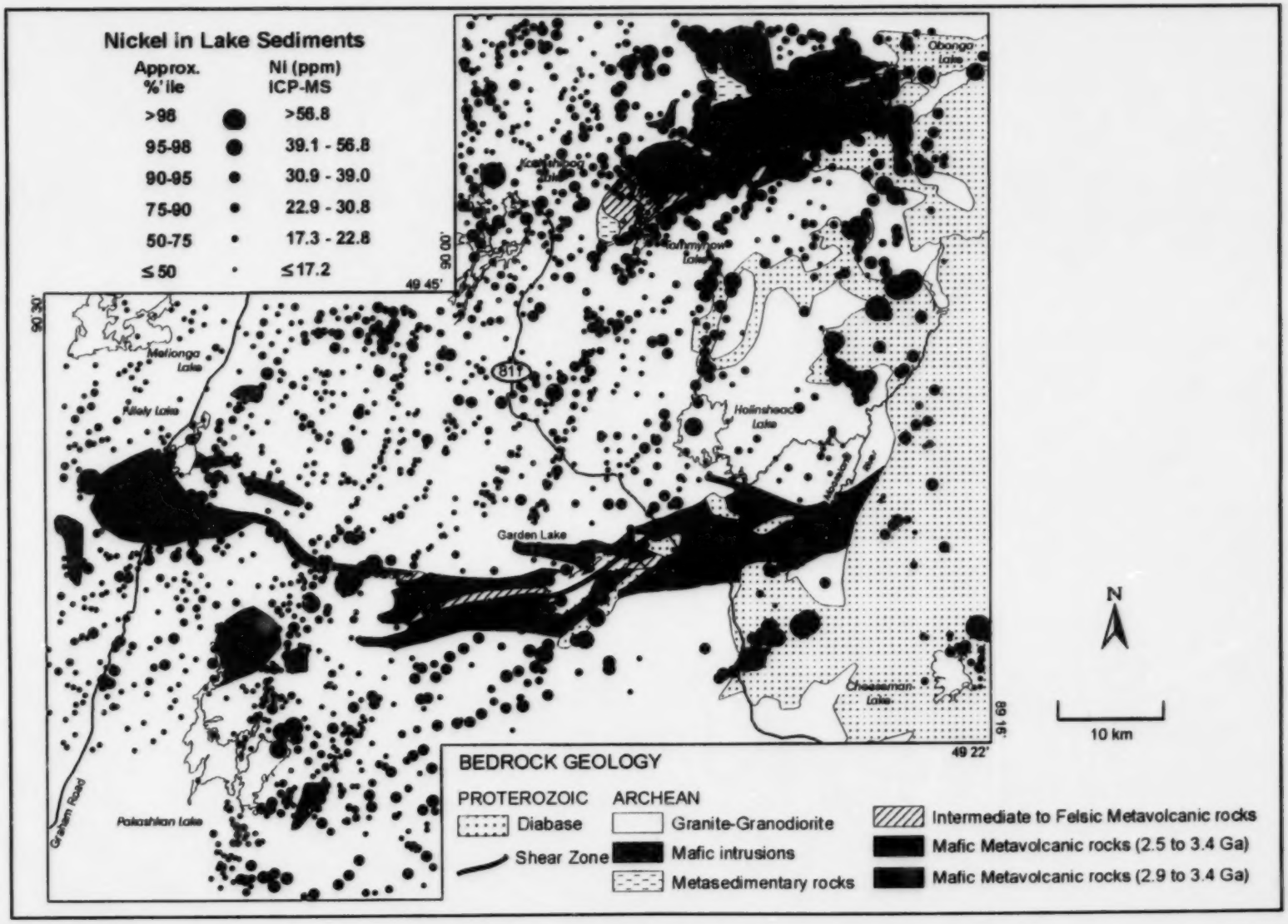

Copper in Lake Sediments
Approx. %'ile
Cu (ppm) ICP-OES
>98
>195.2
95-98
121.1 - 195.2
90-95
88.1 - 121.0
75-90
50.1 - 88.0
50-75
33.1 - 50.0
≤ 50
≤33.0
49 45'
90 30'
90 00'
85 15'
49 22'
Obonga Lake
Melonga Lake
Misty Lake
Hollinshead Lake
Garden Lake
Cheesmond Lake
Graham Road
Pelashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

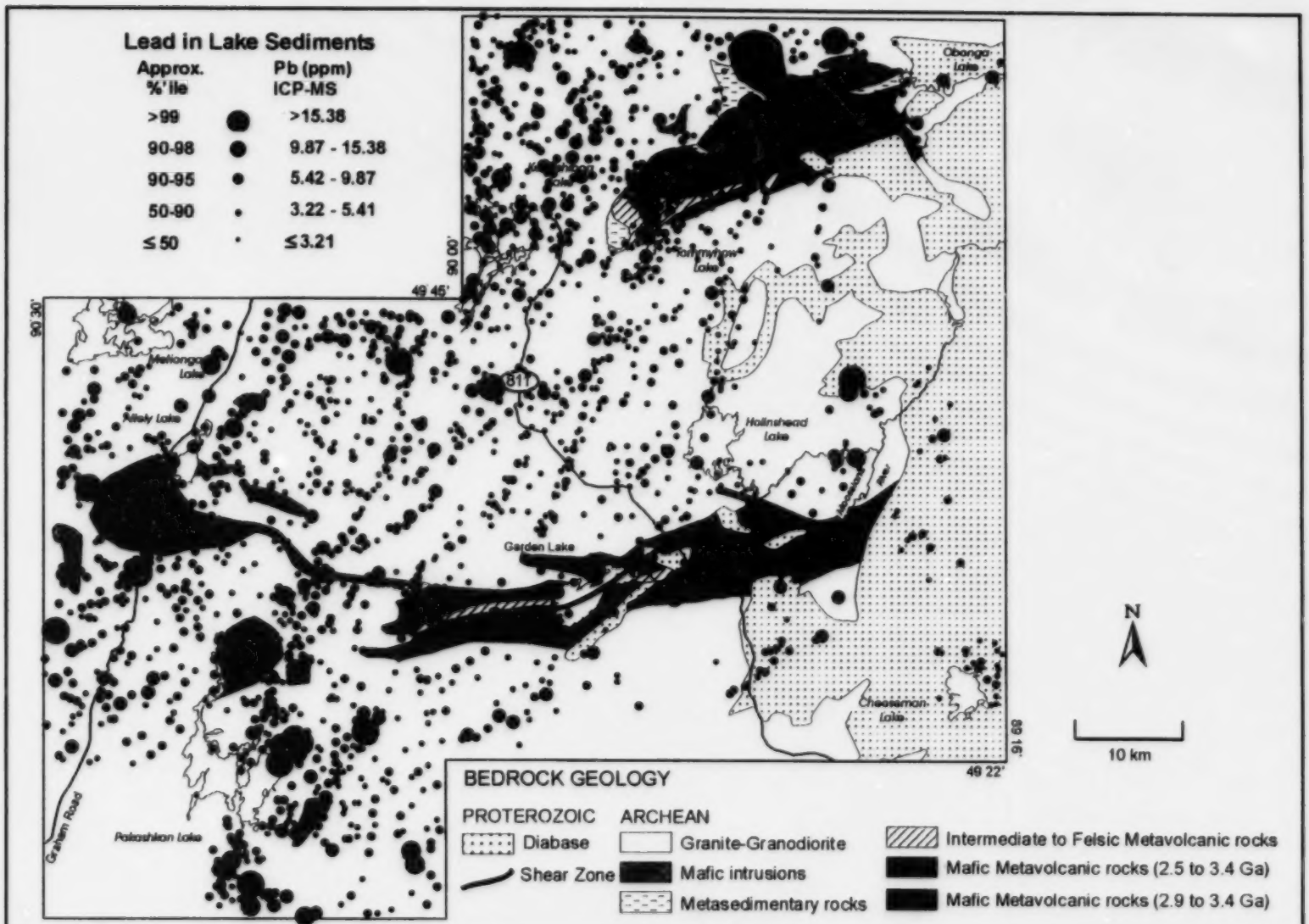

Iron in Lake Sediments
Approx. %'ile
Fe (ppm) ICP-OES
>98
>165603
95-98
106076 - 165603
90-95
69777 - 106075
75-90
35830 - 69776
50-75
17071 - 35629
≤ 50
≤17070
90 30'
90 00'
49 45'
49 22'
Obonga Lake
Hollinshead Lake
Garden Lake
Chesterman Lake
Melonga Lake
Foley Lake
Graham Road
Polashkon Lake
811
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

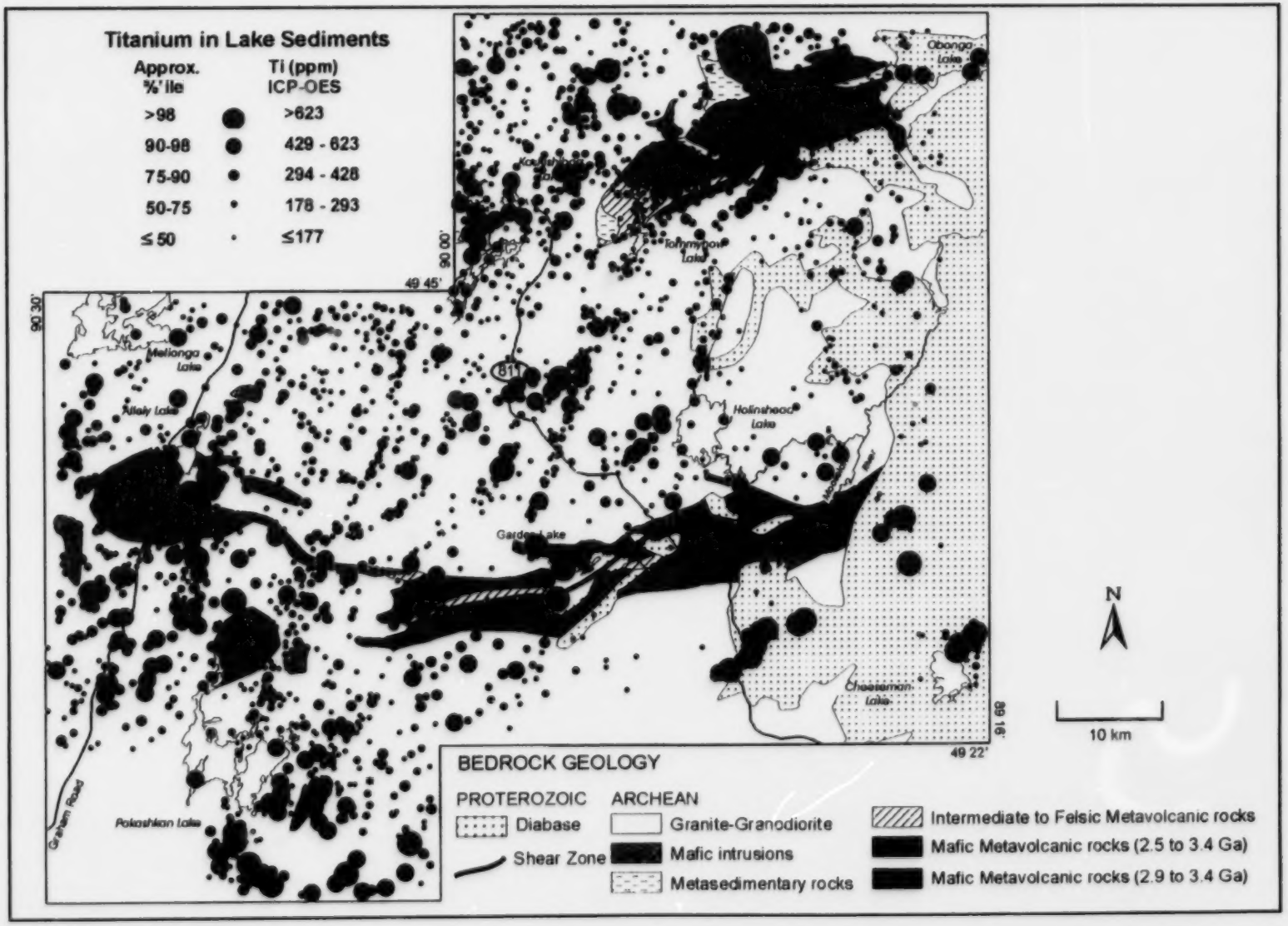

Magnesium in Lake Sediments
Approx. %'ile
Mg (ppm) ICP-OES
>98
>6996
95-98
4599 - 6996
90-95
3577 - 4598
75-90
2560 - 3576
50-75
1741 - 2559
≤ 50
≤1740
90 30'
90 00'
49 45'
49 22'
89 16'
Obonga Lake
Kawashkagama Lake
Kawayniow Lake
Melionga Lake
Riley Lake
811
Holinshead Lake
Gerden Lake
Cheeseman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

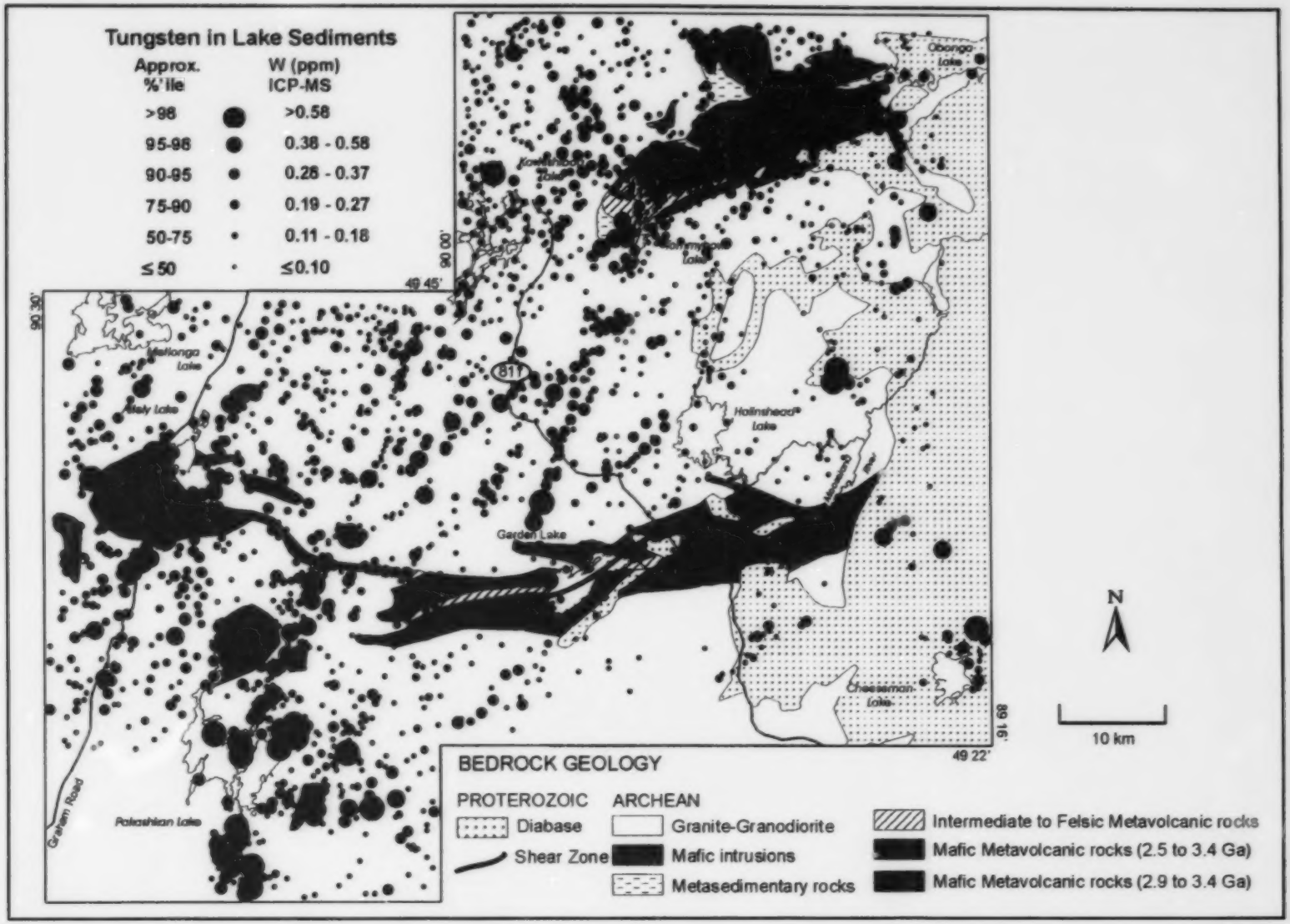

Manganese in Lake Sediments
Approx. %'ile
Mn (ppm) ICP-OES
>98 >2054
95-98 1134 - 2054
90-95 756 - 1133
75-90 419 - 755
50-75 206 - 418
≤ 50 ≤205
90 00'
49 45'
90 30'
49 22'
69 16'
Obonga Lake
Idlimmond Lake
Mellango Lake
Kilely Lake
Holinshead Lake
Garden Lake
Cheesman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

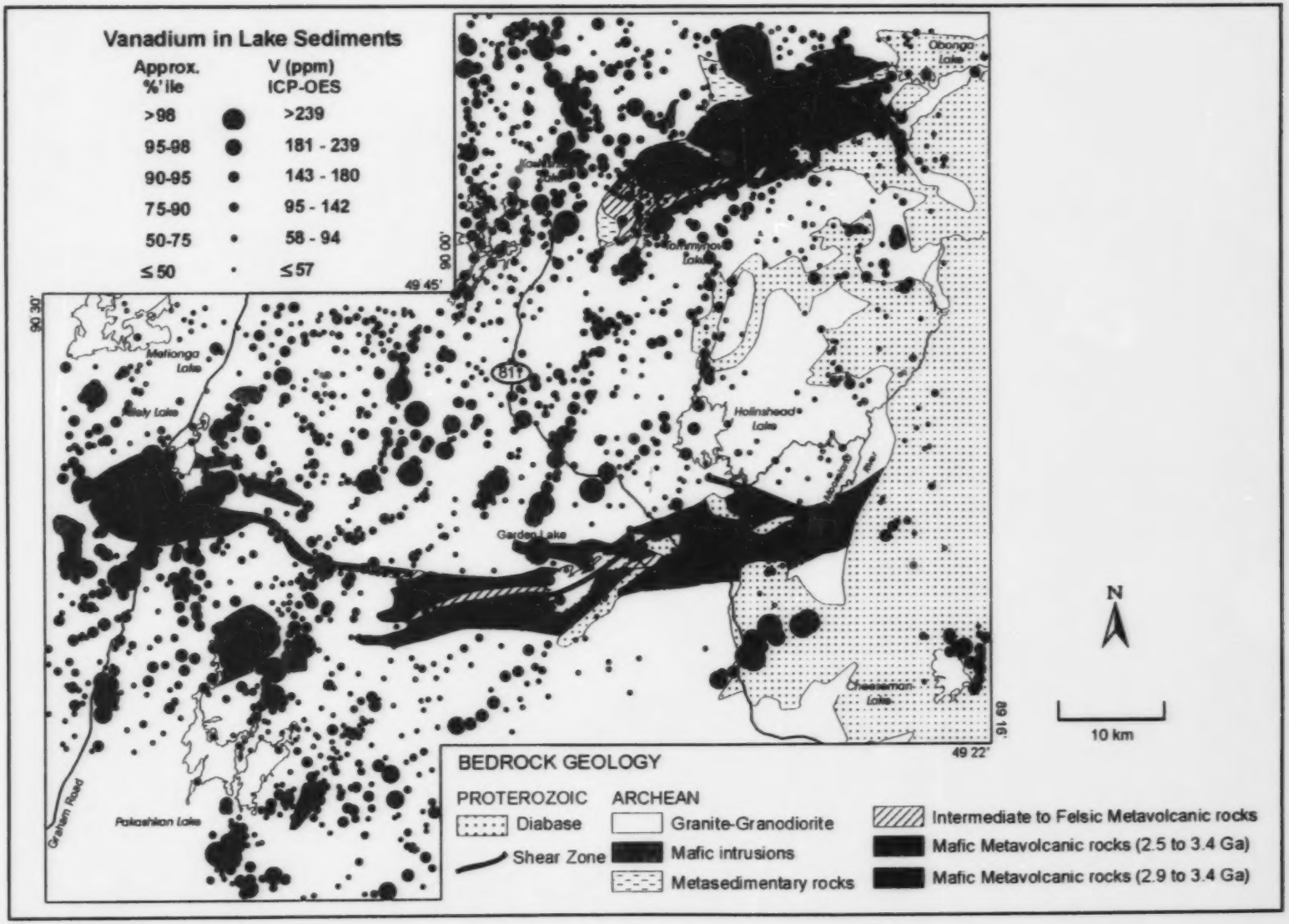

Molybdenum in Lake Sediments
Approx. %'ile
Mo (ppm) ICP-MS
>99 >8.2
98-99 6.0 - 8.2
95-98 3.8 - 5.9
90-95 2.7 - 3.7
50-90 1.3 - 2.6
≤ 50 ≤1.2
49°45'
90°00'
90°30'
Obonga Lake
Kejick River
Hollinshead Lake
Melonga Lake
Alsty Lake
811
Garden Lake
Grassman Lake
89°15'
49°22'
Graham Road
Palashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

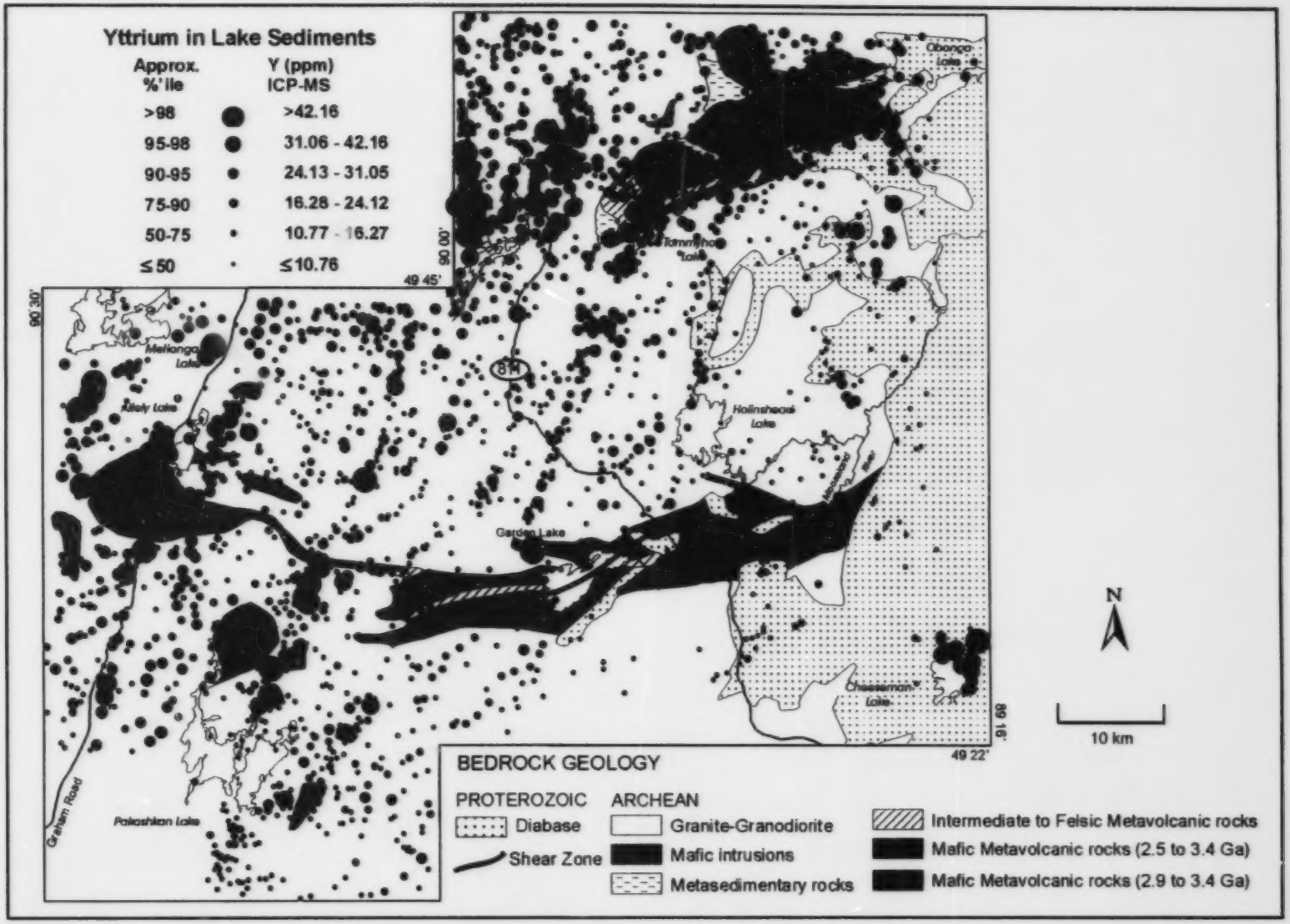

Nickel in Lake Sediments
Approx. %'ile
Ni (ppm) ICP-MS
>98
>56.8
95-98
39.1 - 56.8
90-95
30.9 - 39.0
75-90
22.9 - 30.8
50-75
17.3 - 22.8
≤ 50
≤17.2
90 30'
49 45'
90 00'
89 16'
49 22'
Obonga Lake
Kawashego Lake
Kawmineow Lake
Meliongo Lake
Lilely Lake
811
Holinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

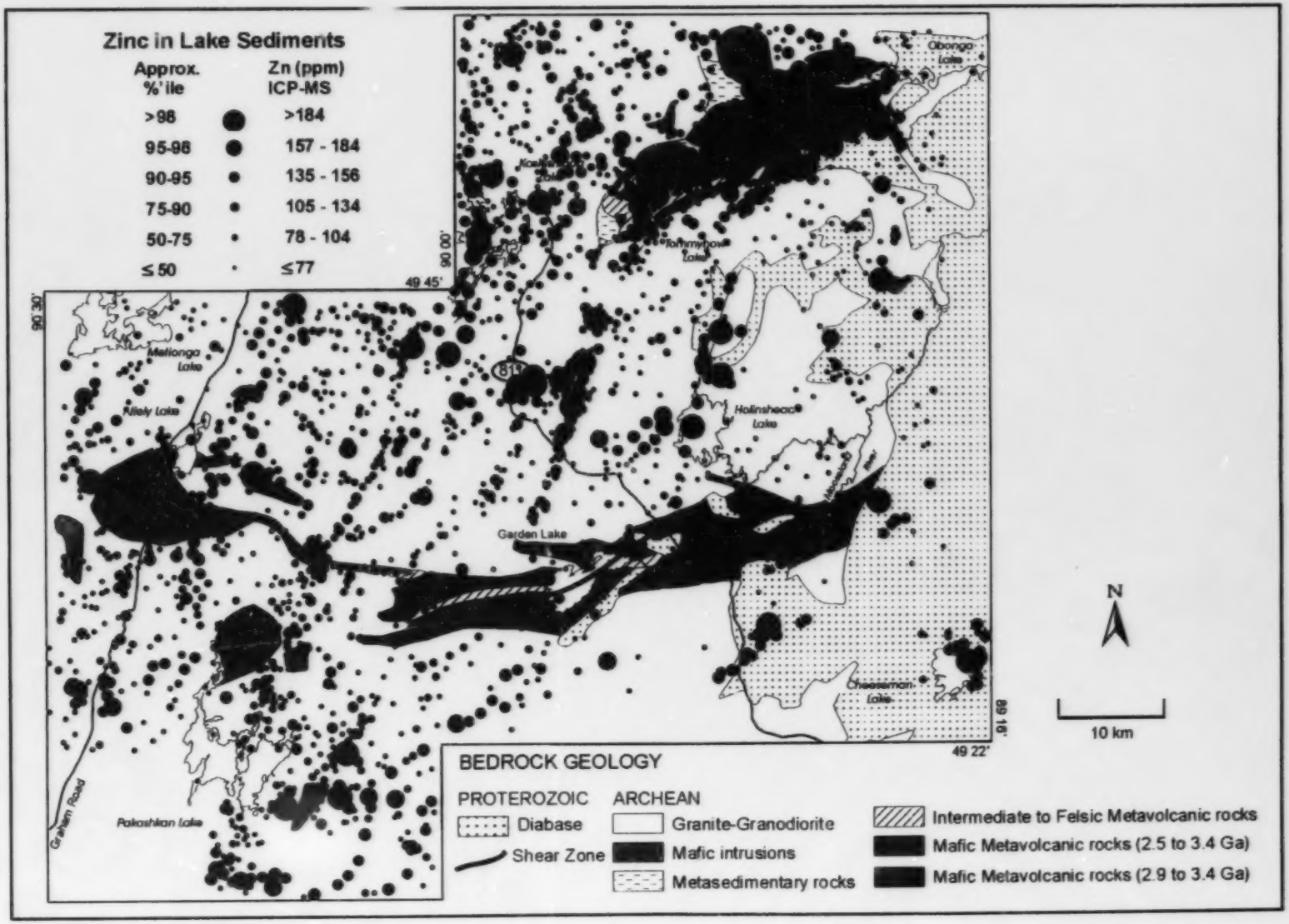

Lead in Lake Sediments
Approx. %'ile
Pb (ppm) ICP-MS
>99
>15.38
90-98
9.87 - 15.38
90-95
5.42 - 9.87
50-90
3.22 - 5.41
≤ 50
≤3.21
49 45'
90 00'
49 30'
89 16'
49 22'
Obonga Lake
Kawaymow Lake
Melonga Lake
Kitely Lake
811
Hollinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

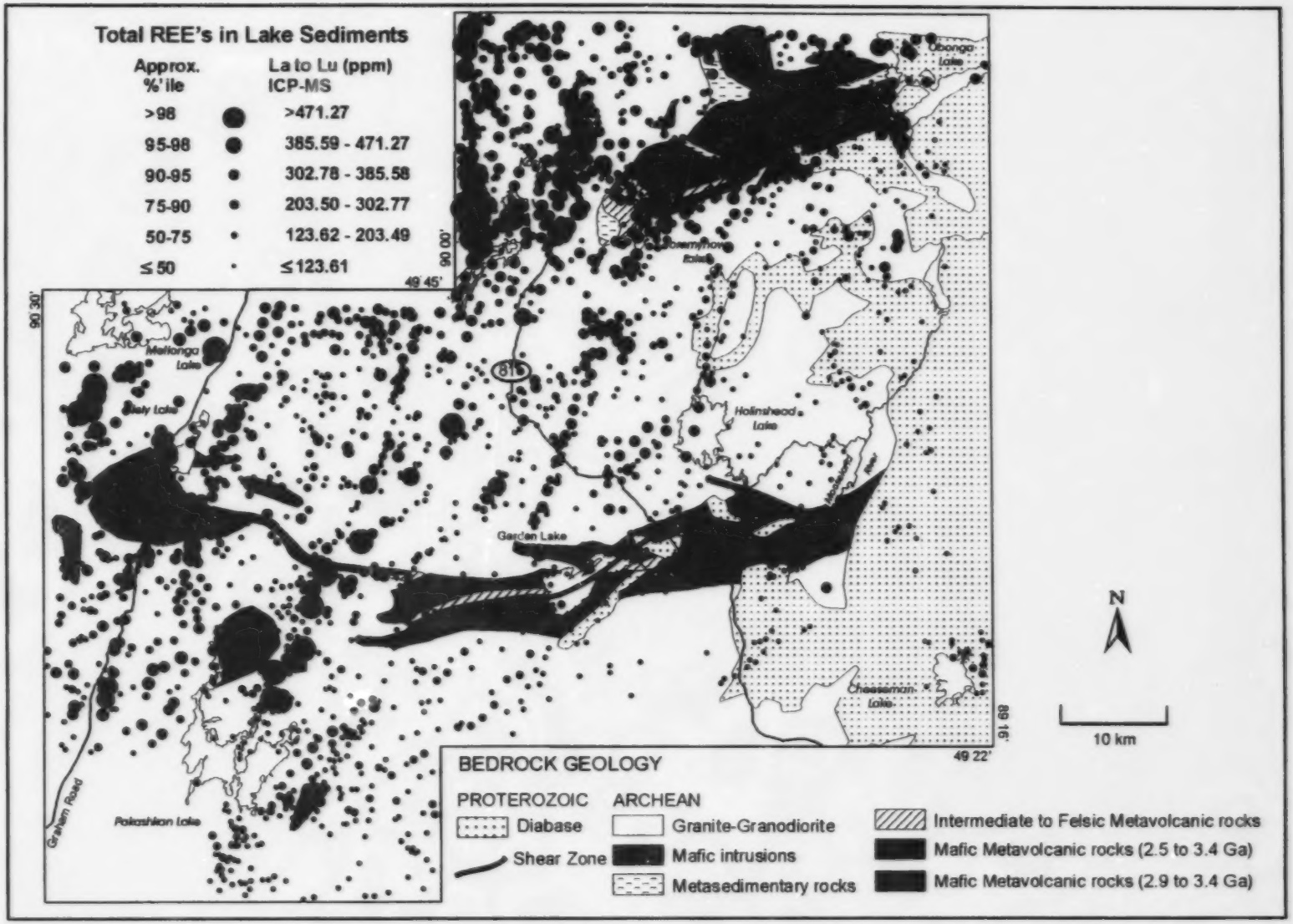

Titanium in Lake Sediments
Approx. %'ile
Ti (ppm) ICP-OES
>98 >623
90-98 429 - 623
75-90 294 - 428
50-75 178 - 293
≤ 50 ≤177
Obonga Lake
Tommypoor Lake
Meliorga Lake
Holinshead Lake
Garden Lake
Cheeseman Lake
Pakashkan Lake
Graham Road
811
90 30'
90 00'
49 45'
89 16'
49 22'
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Tungsten in Lake Sediments
Approx. %'ile
W (ppm) ICP-MS
>98
>0.58
95-98
0.38 - 0.58
90-95
0.28 - 0.37
75-90
0.19 - 0.27
50-75
0.11 - 0.18
≤50
≤0.10
90 30'
49 45'
90 00'
89 16'
49 22'
Obonga Lake
Kawinogans Lake
Lonely Lake
Mellonga Lake
Misty Lake
811
Hollinshead Lake
Garden Lake
Chessman Lake
Graham Road
Potashian Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Vanadium in Lake Sediments
Approx. %'ile
V (ppm) ICP-OES
>98
>239
95-98
181 - 239
90-95
143 - 180
75-90
95 - 142
50-75
58 - 94
≤ 50
≤57
49 45'
90 30'
49 22'
89 16'
Obonga Lake
Hollinshead Lake
Garden Lake
Mafionga Lake
Graham Road
Pakashkan Lake
811
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Yttrium in Lake Sediments
Approx. %'ile
Y (ppm) ICP-MS
>98 >42.16
95-98 31.06 - 42.16
90-95 24.13 - 31.05
75-90 16.28 - 24.12
50-75 10.77 - 16.27
≤50 ≤10.76
90 00'
90 30'
49 45'
49 22'
89 16'
Obonga Lake
Tammino Lake
Melionga Lake
Misty Lake
Hallinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Paloshkan Lake
611
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Zinc in Lake Sediments
Approx. %'ile
Zn (ppm) ICP-MS
>98 >184
95-98 157 - 184
90-95 135 - 156
75-90 105 - 134
50-75 78 - 104
≤ 50 ≤77
90 00'
49 45'
90 30'
49 22'
89 16'
Obongo Lake
Meliongo Lake
Killely Lake
Holinshead Lake
Garden Lake
Cheeseman Lake
Graham Road
Pakoshkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)


Total REE's in Lake Sediments
Approx. %'ile
La to Lu (ppm) ICP-MS
>98 >471.27
95-98 385.59 - 471.27
90-95 302.78 - 385.58
75-90 203.50 - 302.77
50-75 123.62 - 203.49
≤ 50 ≤123.61
90 00'
49 45'
90 30'
49 22'
89 16'
Melonga Lake
Holinshead Lake
Garden Lake
Chesterman Lake
Graham Road
Pakashkan Lake
N
10 km
BEDROCK GEOLOGY
PROTEROZOIC
Diabase
Shear Zone
ARCHEAN
Granite-Granodiorite
Mafic intrusions
Metasedimentary rocks
Intermediate to Felsic Metavolcanic rocks
Mafic Metavolcanic rocks (2.5 to 3.4 Ga)
Mafic Metavolcanic rocks (2.9 to 3.4 Ga)

APPENDIX C

Selected lake sediment analyses for As, Au, Co, Cr, Cu, Fe, Mg, Ni, Pb, U, V, Zn and LOI.

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 15	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
1	98RDD1	302764	5502612	4.2	-2	14.14	77	39	45197	2019	29.3	5.69	1.58	74	128	38.66
2	98RDD2	300693	5502958	3.3	-2	19.17	49	26	73224	1799	16.8	3.66	1.13	129	148	37.98
4	98RDD4	298582	5506469	2.3	-2	4.04	12	28	7660	1075	14.2	2.57	0.52	36	45	39.30
5	98RDD5	295285	5507034	2.6	-2	19.73	57	25	47638	2838	20.8	2.93	1.58	83	215	37.92
6	98RDD6	294037	5508318	3.5	-2	40.99	42	19	51285	3739	24.5	2.45	1.66	70	201	18.90
7	98RDD7	292719	5509926	2.3	-2	3.97	11	15	5396	979	13	2.7	4.39	18	49	35.72
8	98RDD8	289683	5510006	1.4	-2	2.44	3	15	9678	857	8.3	2.89	0.72	30	29	32.51
9	98RDD9	290240	5511022	2.9	-2	4.27	11	47	23095	1088	14.6	3.72	0.88	81	121	61.90
10	98RDD11	288700	5512340	n/a	n/a	4.44	3	21	3300	1387	13.8	2.13	1.82	18	54	57.79
12	98RDD13	291359	5514353	2.2	-2	7.97	18	34	12442	1737	23.2	2.68	1.59	38	117	59.66
13	98RDD14	290324	5514540	0.5	-2	4.58	2	74	3618	1186	13.1	2.96	5	17	33	22.89
14	98RDD15	288110	5514002	1.8	-2	10.18	12	28	17289	1003	19.5	2.04	1.62	58	86	46.49
15	98RDD16	287261	5513896	1.5	-2	6.06	7	28	4658	692	18.2	2.69	1.74	32	40	30.47
16	98RDD17	286851	5513765	1.4	-2	2.57	2	21	3335	782	12.4	1.93	1.28	13	42	57.77
17	98RDD18	285083	5512675	3.1	-2	18.41	30	40	28676	1890	22	3.09	4.23	71	165	39.52
18	98RDD19	285502	5514104	3.2	-2	13.08	25	38	18378	1754	18	5.03	3.64	78	109	43.32
19	98RDD21	284586	5514680	2.5	-2	20.9	24	24	55040	1909	20.5	3.36	2.49	91	144	36.80
20	98RDD22	284022	5514426	1.4	-2	5.29	8	19	13026	1043	12.5	2.52	1.36	61	55	40.73
21	98RDD23	282627	5514865	2.6	-2	12.71	22	30	39510	1616	19.5	7.58	3.48	78	124	34.61
22	98RDD24	279980	5514610	2.6	-2	9.78	13	23	27021	1367	19.4	4.8	3.13	46	88	32.41
23	98RDD25	279705	5514680	1.2	-2	7.75	2	35	15425	722	9.9	3.25	6.83	49	54	45.75
24	98RDD26	279191	5514742	2.3	-2	4.73	1	16	14346	745	15	4.54	2.82	42	67	50.50
25	98RDD27	279228	5515084	1.9	-2	11.72	9	26	30538	1038	20.6	3.99	5.48	54	93	54.43
26	98RDD28	278266	5514756	2.1	-2	13.74	23	35	22290	1048	29	3.41	6.38	48	95	58.77
27	98RDD29	278289	5513702	1.7	-2	11.86	20	26	16854	1035	24.2	3.7	4.2	47	84	39.00
28	98RDD31	278044	5513190	1.8	-2	16.31	31	37	17053	2064	29.7	3.42	4.08	47	77	48.95
29	98RDD32	277090	5512830	1.9	-2	19.74	27	38	47491	1293	22.9	3.81	9.07	74	103	38.50
30	98RDD33	276439	5513174	2.4	-2	9.32	19	29	17211	1036	23.6	4.94	5.82	66	76	44.83
31	98RDD34	276743	5513741	2	-2	11.31	27	34	21276	1666	22.2	3.81	7.07	58	128	44.23
32	98RDD35	277490	5515053	2	-2	8.83	23	29	19925	2217	22.6	4.49	5.8	44	106	31.47
33	98RDD36	276771	5515236	1.9	-2	9.51	22	25	15502	1715	26.1	3.8	4.55	34	96	40.58
34	98RDD37	276226	5514209	1.2	-2	4.31	14	23	11034	770	14.7	2.15	3.83	76	48	47.90
35	98RDD38	275560	5513994	2.5	-2	16.16	27	47	28045	1405	21.8	6.52	6.95	74	106	44.52
36	98RDD39	275867	5512583	1.3	-2	2.71	11	19	7479	769	12.1	2.58	1.3	27	41	35.44
37	98RDD41	275668	5512061	1.4	-2	5.79	26	34	11521	1141	20.1	3.61	2.08	37	72	45.55
38	98RDD42	277080	5511935	1.7	-2	9.56	18	24	18422	1111	22.7	2.41	3.33	39	76	37.89
39	98RDD43	277815	5512347	2.4	-2	5.47	20	23	7928	989	22.9	5.02	2.72	37	55	53.01
40	98RDD44	278562	5511725	1.6	-2	9.3	27	31	12622	1413	15.2	3.13	2.15	69	85	44.08
41	98RDD45	278588	5511833	1.8	-2	7.65	16	18	13935	919	17.1	3.85	1.43	39	66	45.99
42	98RDD46	280111	5511505	2.7	-2	33.44	40	27	70810	2085	24.9	2.96	2.46	116	207	34.96
43	98RDD47	279895	5512081	1.7	-2	3.27	12	18	3200	669	9.8	3.15	0.55	24	130	75.37
44	98RDD48	280300	5512456	1.8	-2	6.58	15	21	16486	733	12.4	2.15	0.92	79	114	66.51
45	98RDD49	280015	5512798	1.8	-2	7.61	21	24	14920	1226	14.4	4	1.86	69	97	46.42
46	98RDD51	280413	5513118	1.6	-2	10.42	18	27	26430	1407	13.8	2.5	3.98	69	71	36.30
47	98RDD52	280606	5513458	1.3	-2	6.78	17	19	11367	879	18.2	2.4	2.02	50	57	34.96
48	98RDD53	281367	5513302	2.4	-2	15.14	26	25	35842	1069	20.3	2.79	1.77	59	126	46.02
49	98RDD54	282629	5512804	2.4	-2	12.32	31	24	37466	1780	17.9	4.2	1.77	93	118	38.78
50	98RDD55	282864	5511444	2.3	-2	4.74	16	13	11229	936	14.1	3.52	0.75	58	63	47.04
51	98RDD56	282797	5510734	7.4	-2	15.66	45	28	52344	2295	26	3.49	2.94	139	128	31.89
52	98RDD57	283428	5510815	5.9	-2	24.86	54	35	68795	2373	35.4	3.02	3.6	189	203	40.77
53	98RDD58	283253	5509975	3.4	-2	4.08	15	16	7066	869	16.9	3.77	1.01	28	42	44.75
54	98RDD59	286667	5510443	2	-2	2.28	7	11	2780	651	7.4	1.12	0.83	14	28	32.75
55	98RDD61	289148	5510278	2	-2	3.35	13	16	5747	966	12.8	4.3	0.86	19	39	36.40
56	98RDD62	290084	5509498	1.5	-2	5.75	15	20	7406	920	11.4	1.82	1.01	56	54	36.00
57	98RDD63	291379	5508596	3.9	-2	33.49	50	30	98573	3084	28.6	3.48	2.07	114	256	37.70
58	98RDD64	292701	5508545	2.3	-2	8.03	17	20	11762	968	18.3	2.05	2.56	45	58	40.78
59	98RDD65	293713	5509060	3.2	-2	8.97	29	27	12334	1829	15.4	3.75	4.66	96	108	47.33
60	98RDD66	293050	5508517	1.6	-2	4.3	11	22	4782	1001	9.8	3.73	1.34	14	40	47.60
62	98RDD68	295982	5505514	2.4	-2	3.4	16	18	5899	1707	14.3	3.03	0.36	34	82	50.66
63	98RDD69	297529	5503112	3.2	-2	8.82	20	63	9087	1332	19.1	2.96	0.82	50	78	53.12
64	98RDD71	298314	5501557	2.7	-2	12.65	22	37	15292	826	17.2	4.66	0.93	68	120	62.23
65	98RDD72	301687	5501824	4.2	-2	30.44	48	33	75832	3178	28.3	3.43	2.09	132	153	34.68
66	98RDD73	302420	5502900	2	-2	4	17	27	4319	743	16.6	2.5	0.66	27	71	60.08
67	98RDD74	299094	5503057	1.9	-2	6.02	22	21	7826	1125	22.6	2.85	0.64	27	57	32.35
68	98RDD75	296004	5503670	2.3	-2	5.74	15	16	9159	778	15.6	2.99	0.36	39	28	50.19
69	98RDD76	293502	5506742	2.3	-2	9.14	16	29	4397	879	19.4	3.04	1.1	20	67	66.02

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
70	98RDD77	293326	5507118	6.5	2	24.51	33	173	28754	8949	48.2	4.01	13.84	76	91	29.87
71	98RDD78	292581	5507691	3.4	-2	19.02	32	58	28443	8947	28.5	4.8	6.6	93	83	5.24
72	98RDD79	291482	5507881	3.9	-2	25.41	41	26	73572	2386	21.6	6.27	1.69	124	223	42.09
73	98RDD81	290324	5507528	2.3	-2	6.9	13	18	16056	753	18.7	2.25	0.73	38	74	41.66
74	98RDD82	289990	5507762	2.3	-2	26.65	33	23	52349	2452	21.8	3.36	1.83	94	195	41.10
75	98RDD83	286805	5508546	6.4	-2	6.26	13	18	14133	974	15.7	16.18	0.72	39	98	60.00
76	98RDD84	286431	5509199	4	-2	5.43	14	18	12002	1532	17.4	4.31	1.52	39	68	50.14
77	98RDD85	286018	5509712	2.6	-2	3.4	8	12	9326	920	11.6	2.27	0.57	35	49	41.88
78	98RDD86	285547	5508839	2.9	-2	4.6	11	18	12838	1237	15.3	2.26	1.12	45	63	45.60
79	98RDD87	284876	5508125	3.3	-2	10.22	19	35	21232	1537	15.7	5.63	2.03	65	86	44.18
80	98RDD88	283337	5508496	2.4	-2	5.45	8	15	12439	995	10	2.36	0.86	27	38	53.32
81	98RDD89	282450	5509609	3	-2	6.8	16	18	17873	1502	18	2.45	1.47	50	66	39.41
82	98RDD91	281380	5509096	1.7	-2	7.64	17	27	14935	1554	15.8	2.58	2.2	52	59	43.83
83	98RDD92	281395	5509654	2.5	-2	6.42	14	18	13012	1477	14.5	3.98	1.64	37	48	42.01
85	98RDD94	279185	5509371	2.4	-2	14.51	23	24	46132	1635	13.4	3.33	2.37	128	100	37.64
87	98RDD96	278971	5509685	1.9	-2	4.9	14	26	3403	1160	13.4	3.73	1.65	25	82	67.15
88	98RDD97	279115	5510518	2.8	-2	56.52	30	33	115957	2879	20.5	3.52	3.68	184	147	38.49
89	98RDD98	278239	5510776	n/a	n/a	21.84	23	26	47438	1768	14.4	35.24	1.81	142	110	48.23
90	98RDD99	277212	5511347	1.7	-2	8.93	19	24	18546	2087	23.2	3.21	2.26	45	87	38.11
91	98RDD101	276300	5510849	1	-2	2.23	16	25	7626	992	12	1.69	1.09	36	34	46.88
92	98RDD102	275521	5511364	1.1	-2	3.99	15	33	10760	1374	13.3	3.38	1.15	65	57	48.89
93	98RDD103	274898	5512626	1.8	-2	8.71	21	40	19293	1586	23.4	3.03	2.96	35	76	44.59
95	98RDD105	274000	5514105	1.4	-2	9.75	22	36	19730	1758	19.1	3.4	2.47	62	74	45.76
96	98RDD106	274773	5514474	1.8	-2	11.74	23	38	52100	1321	18.8	2.61	3.03	84	88	42.74
97	98RDD107	275162	5515230	1.3	-2	2.13	9	20	7861	757	10.5	2.17	1.77	26	33	39.63
98	98RDD108	273726	5515310	1	-2	7.31	21	32	12614	1831	16.8	3.42	2	42	63	44.23
99	98RDD109	272503	5514899	1.6	-2	11.16	32	46	29067	1795	18.2	4.55	3.59	92	93	44.37
100	98RDD111	272922	5514275	1.4	-2	8.63	23	34	16797	1913	14.1	4.53	2.54	95	59	45.48
101	98RDD112	273088	5512722	1.5	-2	15.71	32	45	22696	1993	27.5	5.67	2.15	81	79	45.53
102	98RDD113	272400	5512971	1.1	-2	8.02	29	25	14604	2062	19.6	3.73	1.67	46	48	40.77
103	98RDD114	271627	5513047	2.1	-2	8.26	22	27	12444	2728	19.5	5.59	2.06	37	76	33.90
104	98RDD115	271182	5512892	1.4	-2	11.93	26	28	27228	2491	24.8	2.76	1.61	54	91	34.31
105	98RDD116	270852	5512952	1.5	-2	10.52	24	30	26823	1839	16.7	4.87	1.41	88	91	43.53
106	98RDD117	271166	5514104	1.5	-2	8.66	21	23	12641	2034	20.5	4.8	1.74	31	72	31.30
107	98RDD118	271338	5514685	1.2	-2	10.46	26	26	16379	1668	21.2	2.86	1.65	43	67	37.69
108	98RDD119	268981	5515313	3.9	-2	24.19	25	31	57933	3157	19.2	7.77	1.67	100	208	34.29
109	98RDD121	268631	5513818	2.3	-2	9.2	14	29	14336	872	12.8	2.91	1.55	37	111	60.23
110	98RDD122	269512	5513982	1.8	-2	7.09	18	27	30582	1121	15.5	2.91	1.09	41	82	68.22
111	98RDD123	269843	5512752	2	-2	12.57	27	29	36595	2256	22	3	1.65	77	107	37.99
112	98RDD124	269883	5512107	1.8	-2	13.55	30	32	35306	2028	21.4	3.39	1.88	84	110	40.09
113	98RDD125	268586	5512310	2.1	-2	10.77	20	34	91321	1118	15.1	3.38	2.13	84	92	51.82
114	98RDD126	268017	5511217	2.4	-2	11.86	25	32	31917	1774	13.3	8.58	2.16	135	82	41.49
115	98RDD127	268797	5511804	2	-2	7.66	18	36	15314	1247	15.8	3.73	2.3	36	78	53.80
116	98RDD128	267419	5513057	2.4	-2	8.48	26	27	44626	2235	14.3	6.3	7.07	94	98	31.11
117	98RDD129	267270	5514715	2	-2	7.2	25	31	39215	1792	16.9	4.16	4.02	70	86	33.79
118	98RDD131	267606	5515495	2.3	-2	6.46	27	34	35398	2135	14	5.49	3.75	83	104	38.99
119	98RDD132	266202	5515308	1.8	-2	7.37	26	38	26578	2086	15.6	3.7	4.44	70	94	34.98
120	98RDD133	265967	5513923	1.9	-2	7.83	27	25	26851	2812	17.5	4.02	6.12	54	95	29.60
121	98RDD134	265678	5512783	3.5	-2	14	34	38	65593	3594	21.6	4.74	9.82	103	124	30.08
122	98RDD135	266033	5511590	2.4	-2	8.3	28	30	44221	2883	14.3	4.72	7.5	92	105	30.92
123	98RDD136	264344	5512605	1.5	-2	2.9	10	15	6999	943	10.2	3.18	7.84	31	37	35.56
124	98RDD137	263612	5513441	1.6	-2	4.89	13	23	13654	1091	12.9	2.31	2.91	41	61	47.84
125	98RDD138	262292	5514066	2	-2	5.9	21	29	21422	3101	14.4	5	11.74	48	73	29.35
127	98RDD141	261501	5511491	2.3	-2	10.51	30	43	36005	2279	17.5	6.83	27.08	149	111	45.55
128	98RDD142	262078	5511223	1.7	-2	3.61	14	20	10541	1520	10.2	5.34	6.05	51	60	44.43
130	98RDD144	263714	5509273	1.9	-2	7.87	12	16	11568	1831	10.3	2.33	5.15	36	48	19.43
132	98RDD146	265866	5510751	1.9	-2	14.66	28	44	20984	2173	20.5	3.35	5.04	60	98	30.59
133	98RDD147	267305	5510169	2.6	-2	5.35	18	22	10414	881	18.2	3.78	0.91	33	74	58.64
134	98RDD148	268906	5509468	1.6	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	63.35
135	98RDD149	270953	5509368	1.5	-2	4.35	19	39	7924	1090	17.1	2.82	1.54	35	45	52.37
136	98RDD151	271445	5509062	1.4	-2	3.42	16	28	7073	960	14.5	2.17	1.18	33	52	39.83
137	98RDD152	271619	5508902	1.3	-2	2.1	11	22	9778	834	13	1.68	0.95	33	46	41.62
138	98RDD153	271961	5509053	1.6	-2	12.76	26	33	17695	1410	17.8	4.54	1.85	71	79	45.45
139	98RDD154	272704	5511433	1.7	-2	12.99	32	42	22741	2438	26.6	3.21	2.83	65	98	44.12
140	98RDD155	273711	5511233	1.8	-2	3.68	13	28	7228	1020	14	2.94	1.64	24	45	41.63
141	98RDD156	274963	5509694	1.2	-2	2.6	10	38	8180	825	11.6	1.87	1.13	37	68	58.45

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING Method----> Units----> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
142	98RDD157	276703	5509589	1.5	-2	4	14	22	7221	1181	15.5	2.39	1.22	29	29	50.73
143	98RDD158	276872	5509108	2.8	-2	18.79	32	44	49589	2930	24.3	3.37	3.58	96	122	35.67
144	98RDD159	278860	5508785	2.3	-2	56.28	22	24	105548	1175	12.3	3.43	2.13	178	79	52.19
145	98RDD161	280370	5505369	3.2	-2	8.19	37	26	63123	2254	13.9	3.5	2.42	315	62	52.26
146	98RDD162	283358	5504994	1.8	-2	3.12	10	19	5512	1031	10.4	1.48	2.2	42	32	31.93
147	98RDD163	284297	5506451	3.9	-2	16.18	45	34	99649	4033	23.6	3.58	2.81	113	164	32.93
148	98RDD164	285539	5506165	6.2	-2	32.12	30	38	117197	3751	26.8	3.8	3.23	111	120	23.07
149	98RDD165	287288	5507194	2.6	-2	4.45	14	22	9685	1159	16.9	4.18	1.04	40	87	59.39
150	98RDD166	290289	5506499	2.8	-2	21.78	29	22	49436	2605	18.1	2.83	1.4	82	139	37.62
151	98RDD167	292987	5506108	3	-2	2.65	11	31	3212	1202	12.8	1.74	1.39	23	48	57.73
152	98RDD168	297822	5502965	3	-2	3.87	14	30	8977	1344	15.1	2.04	1.1	38	36	40.80
153	98RDD169	300928	5501189	2.3	-2	12.53	33	20	17092	3011	16.1	2.59	1.75	49	58	15.31
154	98RDD171	305563	5500217	1.5	-2	5.57	15	32	10475	1612	14.5	1.74	0.75	35	44	30.15
155	98RDD172	302810	5500172	1.9	-2	10.33	18	33	9848	2198	21.6	2.13	0.95	31	52	16.82
156	98RDD173	300086	5500255	2.4	-2	6.7	28	30	17241	1699	15.1	2.98	1.91	78	61	39.61
157	98RDD174	298023	5500540	2.7	-2	7.86	16	20	10165	1773	13.5	2.25	1.18	27	61	55.07
158	98RDD175	293915	5501171	2.1	-2	6.74	16	19	7327	2101	16.1	3.17	0.37	21	106	56.46
159	98RDD176	293007	5503341	3.2	-2	9	21	40	15541	1518	18.3	1.82	1.66	66	55	39.75
160	98RDD177	289915	5504105	1.3	-2	6.13	18	32	5683	1319	17	3.44	0.86	46	105	66.66
161	98RDD178	289404	5503834	2.7	-2	6.76	15	20	21333	979	12.1	2.37	0.86	60	85	63.45
162	98RDD179	286234	5504735	2	-2	17.63	30	22	73076	2210	15.7	3.43	1.43	121	112	35.33
164	98RDD182	282968	5504447	0.5	-2	1.79	7	11	1214	488	-5	0.98	3.23	17	13	19.27
165	98RDD183	280148	5505040	1.5	-2	3.88	19	12	7317	2391	15.4	6.25	0.63	31	55	34.76
166	98RDD184	278406	5506190	0.5	-2	1.81	9	17	7192	785	8.1	1.69	0.87	24	30	41.45
167	98RDD185	275599	5507332	2.3	-2	16.27	20	20	41686	1484	13.4	2.85	1.99	86	83	42.57
168	98RDD186	273435	5509117	1.1	-2	2.7	9	20	5429	965	10.1	2.32	1.12	24	27	33.57
169	98RDD187	271714	5508097	1	-2	2.74	13	17	10795	885	11.9	2.21	1.06	52	29	32.44
170	98RDD188	269934	5506813	1.5	-2	2.67	11	31	10798	944	11.3	3.19	1.05	50	51	54.55
171	98RDD189	267823	5508972	1.3	-2	4.38	24	36	22110	1422	11.4	3.24	2.13	184	60	51.69
172	98RDD191	267638	5509223	1	-2	3.42	20	20	12744	1824	11.1	3.58	1.44	88	30	32.53
173	98RDD192	267480	5508331	0.5	-2	2.09	17	9	3003	595	8.7	1.82	0.8	21	17	25.27
174	98RDD193	266323	5509033	3.9	-2	16.93	27	46	37554	2359	31.6	4.4	3.72	72	106	46.13
175	98RDD194	265935	5507847	2.3	-2	13.72	34	30	49055	2796	21.4	3.4	2.59	83	125	39.52
176	98RDD195	264285	5506348	1.4	-2	2.76	7	17	3354	708	9.2	2.79	1.71	16	31	49.86
177	98RDD196	263961	5505792	1.3	-2	3.12	6	17	2878	642	7.3	1.66	3.4	23	30	41.06
178	98RDD197	263479	5505659	2.8	-2	7.97	36	36	65867	2857	17.4	4.79	3.08	165	75	45.91
179	98RDD198	263697	5506175	1.9	-2	5.56	14	12	11952	807	11	2.04	0.51	50	109	67.55
180	98RDD199	263537	5506792	2.6	-2	3.69	12	10	10180	1071	10.5	2.87	0.57	48	23	54.80
181	98RDD201	262768	5506089	3.3	-2	5.17	22	20	26352	1822	13.4	4.4	2.17	88	69	42.02
182	98RDD202	260648	5507616	1.4	-2	1.99	18	14	3081	1214	9.4	5.77	0.71	19	74	41.49
183	98RDD203	260900	5510537	3.2	-2	3.44	15	13	16522	1334	10.2	12.32	38.38	43	61	33.53
184	98RDD204	260391	5513896	2.3	-2	5.51	20	31	12279	2265	16.3	4.76	33.11	35	66	33.52
185	98RDD205	260523	5515401	1.1	-2	3.3	11	11	14079	782	8.5	1.46	1.1	49	45	39.29
187	98RDD207	259401	5514966	2	-2	3.6	13	19	6701	1197	9.6	3.2	6.88	27	61	57.32
188	98RDD208	257895	5515730	2.2	-2	6.03	16	18	8605	990	13.5	3.85	7.32	48	62	42.74
190	98RDD211	257330	5515116	2.7	-2	3.06	7	13	7719	1097	9.1	1.88	4.01	20	63	54.57
191	98RDD212	258531	5514240	2.1	-2	5.74	14	19	8498	1077	12.8	2.9	4.66	43	53	44.06
192	98RDD213	259205	5514048	2.9	-2	7	12	19	18768	894	10.3	5.99	4.38	28	69	63.27
193	98RDD214	259197	5513210	2.4	-2	7.34	21	34	22141	2513	15.8	5.03	33.28	50	71	33.00
194	98RDD215	258133	5512374	3	-2	11.99	28	23	28636	3211	16.5	4.99	95.67	51	103	21.60
196	98RDD217	254193	5512566	2.6	-2	9.56	31	21	49977	2601	15.1	4.93	8.33	81	81	29.64
197	98RDD218	253175	5515174	4	-2	8.34	25	27	22804	2622	16.3	10.07	14.4	49	72	30.01
198	98RDD219	252973	5515811	2.2	-2	7.06	18	23	14342	1920	13.5	4.07	2.32	40	68	37.32
200	98RDD222	247582	5509782	2.9	-2	20.9	35	21	96214	2490	17.1	5.01	8.84	125	115	26.46
201	98RDD223	250237	5509864	1.4	-2	3.21	10	20	6655	1007	11	5.06	13.22	38	39	44.05
202	98RDD224	252442	5508975	1.7	-2	6.47	19	22	23426	1672	14	2.94	10.91	59	71	35.54
203	98RDD225	253036	5509343	2.4	-2	6.38	25	22	30184	1445	14.2	3.95	12.54	115	81	40.90
204	98RDD226	253552	5509913	2	-2	3.76	12	15	9654	1039	10.3	2.45	12.71	48	47	43.93
205	98RDD227	254187	5509510	1.7	-2	2.64	7	12	5255	697	5.2	4.62	20.85	17	38	37.34
206	98RDD228	254414	5510009	1.7	-2	5.54	12	17	16805	855	10.6	3.79	11.49	41	59	47.42
207	98RDD229	255254	5510193	1.5	-2	5.32	14	14	13088	1138	10.4	2.25	7.43	34	59	43.32
208	98RDD231	258149	5508602	2.3	-2	9.33	27	22	40222	3299	15.7	6.77	13.1	92	80	23.86
209	98RDD232	260345	5504883	1.7	-2	5.45	20	15	17178	2268	15.5	4.61	2.79	44	71	27.62
210	98RDD233	263035	5504653	5.9	-2	10.64	37	54	70776	3281	21.8	11.42	4.71	199	91	59.92
211	98RDD234	266340	5504398	2.6	-2	4.84	18	18	13096	1434	12.3	2.67	1.27	37	59	42.04
212	98RDD235	272230	5503309	2.5	-2	5.82	12	20	10927	1248	12.2	2.54	1.9	42	70	55.11

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
213	98RDD236	275419	5503410	2	-2	11.42	26	34	21337	1415	17	3.58	1.85	99	91	45.46
214	98RDD237	281418	5502720	22	-2	7.07	26	24	17337	2381	23.4	5.9	28.58	146	67	34.78
215	98RDD238	284766	5503471	1.9	-2	7.2	23	25	28068	1646	14	2.72	1.15	87	69	40.26
216	98RDD239	289666	5501912	4.5	-2	6.48	18	19	9217	2137	16.9	3	0.97	42	100	41.44
217	98RDD241	293935	5501679	2.6	-2	2.79	7	37	3141	804	14.3	2.02	0.6	14	44	69.04
218	98RDD242	298165	5499800	4.9	-2	7.41	28	41	23954	1895	14.5	2.92	1.61	234	68	63.88
219	98RDD243	300739	5499668	2.3	-2	5.82	21	51	12388	1408	20.7	3.99	1.97	40	61	52.98
220	98RDD244	305245	5498913	1.4	-2	3.56	7	46	6885	581	10.2	2.53	0.38	19	27	36.66
221	98RDD245	301874	5498678	2.2	-2	7.37	16	46	6447	1799	22.8	1.93	1.01	35	59	42.30
222	98RDD246	298121	5501658	1.9	-2	3.47	11	17	7901	933	12.3	1.47	0.54	22	30	42.27
223	98RDD247	294803	5504522	2.9	-2	25.07	34	29	69611	2496	21.1	2.38	1.48	120	146	39.74
224	98RDD248	292364	5505324	1.6	-2	2.76	13	10	7778	773	8.3	2.42	0.42	88	25	39.35
225	98RDD249	292401	5505932	2.3	-2	3.24	9	13	12833	737	7.9	2.85	0.32	42	31	51.12
226	98RDD251	291765	5506194	3.3	-2	16.87	26	17	46892	2614	17.7	2.07	1.71	66	118	21.50
227	98RDD252	289309	5506928	2.3	-2	29.48	31	21	60830	2729	20.6	3.2	2.07	101	169	36.85
228	98RDD253	288240	5506162	7.5	-2	25.92	27	65	41236	4091	35.9	3.95	4.83	50	98	38.20
229	98RDD254	286799	5505296	n/a	n/a	9.78	30	53	20261	10403	26.4	3.87	4.44	61	44	5.98
230	98RDD255	285708	5504181	1.2	-2	12.79	18	11	42977	2001	11.1	1.91	1.07	61	84	10.43
231	98RDD256	284052	5503946	3	-2	15.74	17	31	134414	1090	14.6	1.65	1.42	67	62	41.21
232	98RDD257	283721	5504473	8.6	-2	14.92	40	35	152342	2003	20	3.24	2.76	230	100	55.66
233	98RDD258	283213	5503851	1.7	-2	3.72	13	13	6903	1291	13.3	2.86	0.51	24	63	50.71
234	98RDD259	280257	5503324	4.2	-2	13.02	30	29	84782	1890	21.3	3.08	1.26	112	134	46.80
235	98RDD261	279507	5505211	2.2	-2	6.37	15	16	24604	1321	14.4	2.67	1.34	72	61	36.21
236	98RDD262	275714	5505350	2.5	-2	4.42	16	16	13028	1412	14.5	4.38	1.39	76	56	37.64
237	98RDD263	275040	5505764	1.6	-2	9.3	23	26	21563	1702	18	2.45	1.16	62	92	44.04
238	98RDD264	273513	5507090	1	-2	3.21	8	17	4555	955	9.3	2.83	1.31	15	21	30.57
239	98RDD265	272440	5507127	1.4	-2	5.13	15	35	12275	1223	14.9	2.73	1.98	61	51	43.83
240	98RDD266	271828	5507261	1.1	-2	6.27	14	34	8723	982	13.8	2.04	1.98	46	41	41.33
241	98RDD267	270920	5507209	2.9	-2	9.95	22	20	15937	2158	13	4.32	3.13	62	100	47.66
242	98RDD268	269826	5507738	2.3	-2	9.59	24	22	16164	2240	15.1	4.74	2.79	55	106	49.88
243	98RDD269	268677	5507899	2.3	-2	9.34	28	22	20312	2281	16.2	2.06	2.56	50	98	39.98
244	98RDD271	268111	5506857	2.4	-2	15.21	20	19	43562	2275	8.5	3.72	2.48	126	110	43.67
245	98RDD272	267676	5506290	2.5	-2	5.26	15	19	15746	1753	12.1	2.18	1.5	41	66	45.92
246	98RDD273	264815	5505057	1.9	-2	4.79	11	12	18242	936	11	2.19	0.33	24	89	62.61
247	98RDD274	264388	5504021	2.2	-2	3.48	14	14	14102	1453	9.4	3.16	0.61	49	92	58.03
248	98RDD275	261865	5504431	4.1	-2	7.48	33	36	69844	2414	18.8	4.8	3.56	137	79	60.41
249	98RDD276	259342	5504186	3.4	-2	8.04	26	33	30114	3012	20.6	4.51	4.82	61	74	33.58
251	98RDD278	256356	5503869	1	-2	2.71	10	21	11260	984	8.4	4.08	9.5	85	45	37.64
252	98RDD279	255124	5503602	1	-2	3.63	9	9	17785	1713	6.1	4.29	2.93	29	43	16.05
253	98RDD281	253469	5502717	2	-2	5.53	11	11	15014	1317	13.8	2.77	0.66	23	104	47.91
254	98RDD282	252198	5504677	3.7	-2	12.82	26	20	83478	1882	19	3.9	2.73	124	105	64.19
255	98RDD283	253122	5505740	1.9	-2	4.78	15	20	18165	1258	12.4	2.59	4.34	72	50	56.90
256	98RDD284	253348	5506422	1.5	-2	4.11	19	19	13366	1518	13.6	3.02	3.38	91	46	48.02
257	98RDD285	253970	5507577	1	-2	5.24	16	37	12530	1207	15.3	2.79	1.99	60	49	27.90
258	98RDD286	254425	5507470	2.6	-2	8.64	20	18	34331	1959	11.1	2.4	3.65	72	111	53.60
259	98RDD287	254935	5506303	2.3	-2	4.65	14	14	18348	1378	11.1	3.13	4.9	49	59	42.66
260	98RDD288	253636	5506657	2.4	-2	4.57	10	10	12196	1043	8.1	4.6	6.61	35	74	46.38
261	98RDD289	250242	5506128	2.9	-2	8.03	33	29	53647	3277	16.3	5.97	47.03	117	110	38.26
262	98RDD291	250167	5507241	3.7	-2	26.51	42	32	186683	2256	18	4.52	33.43	305	104	42.59
263	98RDD292	249229	5506987	2.7	-2	20.45	23	19	80100	1121	16	2.87	2.89	135	166	66.77
264	98RDD293	249794	5505986	2.2	-2	10.25	25	29	36243	2541	17.3	4.71	13.71	83	73	44.13
265	98RDD294	248661	5505656	4.9	-2	13.96	46	n/a	n/a	n/a	20.3	6.45	20.54	n/a	133	40.58
266	98RDD295	247346	5505953	1.7	-2	4.02	9	12	28356	1516	9.6	4.58	1.9	45	77	74.11
267	98RDD296	248348	5504717	2.7	-2	9.01	30	27	55531	3015	18.3	5.55	6.54	103	98	32.35
268	98RDD297	247750	5503433	2.2	-2	7.83	27	21	48315	2612	16.3	5.02	5.13	85	84	24.72
269	98RDD298	249572	5503612	1.9	-2	6.44	18	22	15225	1287	15	3.3	2.1	80	95	54.29
271	98RDD301	250537	5504054	2.4	-2	10.47	29	26	61538	2131	18.1	2.87	6.04	124	129	41.49
272	98RDD302	251384	5502960	2.3	-2	9.13	25	12	52786	1831	12.1	3.87	3.1	117	87	38.92
273	98RDD303	250849	5502773	2	-2	5.77	19	9	23218	1540	10.2	3.19	2.5	58	73	31.32
274	98RDD304	250047	5502485	1.1	-2	3.46	12	9	15481	1300	7.2	3.16	2.72	42	37	19.00
275	98RDD305	249570	5502512	2.6	-2	7.71	27	23	39963	2476	18.2	5.13	5.66	79	84	38.56
276	98RDD306	248792	5501918	1.6	-2	3.22	13	16	20950	1061	9.4	2.27	1.54	83	57	42.11
277	98RDD307	248318	5502361	3.3	-2	6.42	25	25	36590	2315	17.2	6.04	4.7	81	87	48.29
278	98RDD308	247783	5502098	1.2	-2	2.71	9	8	13381	1251	6.5	2.44	1.65	24	27	11.73
279	98RDD309	248221	5500817	1.7	8	14.34	34	25	94525	2422	14.5	3.22	3.81	136	110	25.96
280	98RDD311	247384	5500399	2.4	-2	4.74	27	30	5836	1746	17.6	5.85	2.28	83	91	60.17

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
			Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
			Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
281	98RDD312	247194	5499306	2.8	-2	25.96	33	28	111409	2663	21.3	3.8	4.58	122	95	36.81
282	98RDD313	248663	5500027	2.1	-2	8	37	16	77514	1829	15.3	3.22	2.76	145	81	46.87
283	98RDD314	249204	5498443	4.7	-2	25.37	51	42	103328	2610	20.3	5.84	7.03	260	139	42.03
284	98RDD315	248768	5498115	1.4	-2	2.83	19	19	23168	1203	10.1	2.3	1.32	103	59	45.68
285	98RDD316	248787	5497425	1.4	-2	8.91	21	27	37203	1004	14.9	2.9	2.19	137	44	54.30
286	98RDD317	249891	5498176	1.7	-2	2.72	10	21	3097	890	7.5	2.29	1.83	23	60	64.78
287	98RDD318	249713	5499024	1.2	-2	9.73	-1	15	24761	1398	98.6	63.98	4.91	93	236	39.98
288	98RDD319	250244	5499175	1.2	-2	2.96	14	13	6887	1799	10.8	2.92	1.63	26	36	29.74
289	98RDD321	252216	5498401	2.2	-2	2.94	27	31	7236	1783	14.9	6.18	2.74	33	94	62.06
290	98RDD322	252943	5498986	3.9	-2	19.5	44	45	137820	3054	24.3	8.41	7.33	167	127	33.13
291	98RDD323	254067	5499444	2.8	-2	18.32	39	40	61970	3853	23.7	7.84	7.96	160	132	22.42
292	98RDD324	254582	5500010	1.3	-2	7.42	22	32	23535	1560	12.9	3.31	5.07	105	62	40.06
293	98RDD325	253280	5500467	2	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	30.75
294	98RDD326	251861	5501965	1.7	-2	2.87	9	11	4721	1076	11	2.09	1.27	17	42	42.22
295	98RDD327	255477	5501044	1.9	-2	3.69	14	25	5725	1336	12.1	3.82	3.89	32	66	40.24
296	98RDD328	255642	5501417	2.3	3	14.58	21	28	186554	1312	9.1	3.99	5.65	283	76	49.94
297	98RDD329	255425	5501561	1.6	-2	2.87	7	14	4586	930	8.2	2.47	2.43	31	35	33.20
299	98RDD332	255678	5503330	0.5	-2	3.1	8	7	15040	1516	5.2	3.37	2.81	25	35	9.66
300	98RDD333	256414	5503002	1.9	-2	3.1	21	32	39190	974	11.8	3.15	16.66	70	105	78.51
301	98RDD334	256995	5503283	2.3	-2	2.75	11	34	16626	771	7.8	2.39	22.66	53	75	74.01
302	98RDD335	259264	5502761	3	-2	12.21	46	36	48856	4360	25.5	5.97	6.92	93	118	33.39
303	98RDD336	261823	5502817	3.5	-2	3.64	16	22	7711	1162	10.1	2.28	6.27	58	62	45.54
304	98RDD337	261770	5503791	4.5	-2	10.89	46	39	144111	2640	22.3	4.43	4.78	232	92	49.81
305	98RDD338	263180	5503005	1.3	-2	4.75	23	30	5273	2025	15.3	4.62	2.57	39	70	38.44
306	98RDD339	264882	5503481	3.8	-2	24.59	45	11	171034	1493	12.8	2.95	1.25	219	150	56.33
307	98RDD341	265772	5502160	2.3	-2	13.35	24	21	34628	2267	15.1	3.22	1.52	92	103	34.36
308	98RDD342	269095	5505257	2.2	-2	4.38	13	13	8345	1460	11.9	2.04	2.64	32	47	38.08
309	98RDD343	269719	5504926	2.9	-2	10.2	25	26	21851	1945	17.7	2.78	4.62	81	93	35.48
310	98RDD344	271433	5505413	1.6	-2	2.18	25	23	3072	924	15.3	4.67	0.83	30	50	56.11
311	98RDD345	271304	5506661	1.7	-2	3.84	18	14	9175	928	9.9	1.44	1.45	28	46	35.59
312	98RDD346	272454	5505914	1.3	-2	5.75	16	20	14696	1451	12.3	2.4	1.61	50	48	45.07
313	98RDD347	274991	5505236	2.2	-2	13.35	19	28	14257	1852	24.7	2.44	1.86	48	78	22.12
314	98RDD348	277604	5503600	1.3	-2	4.33	17	13	20093	954	9.2	2	1.12	114	41	33.58
315	98RDD349	278754	5502525	3	-2	8.04	30	19	36513	1215	13.4	3.48	0.8	79	145	61.35
316	98RDD351	279076	5502680	2.3	-2	6.77	29	11	39818	970	11.2	1.52	0.71	124	112	52.10
318	98RDD353	283758	5503010	2.9	-2	11.37	31	24	9822	2526	22.7	3.6	0.93	47	92	52.62
319	98RDD354	286922	5502502	2	-2	10.14	24	16	28021	1824	14	3.08	1.41	68	85	32.27
320	98RDD355	289805	5501232	2.9	-2	5.57	14	15	10106	1573	12.7	2.48	0.89	36	84	43.92
321	98RDD356	293088	5500732	0.5	-2	1.49	9	35	6798	1312	9.5	1.14	0.42	21	33	41.60
322	98RDD357	293687	5500899	2	-2	4.89	16	16	14988	1265	13.5	1.51	0.24	21	81	62.52
323	98RDD358	299261	5500324	2.5	-2	2.58	31	25	1826	933	8.8	1.96	2.3	15	25	38.84
324	98RDD359	300467	5500752	1.5	-2	7.18	20	17	10007	2678	13.8	3.45	1.16	42	54	30.15
325	98RDD361	304935	5499056	1.5	-2	7.35	13	95	3982	1173	19.5	2.01	0.81	40	99	61.49
326	98RDD362	306660	5498847	1.8	-2	3.7	12	79	5595	1787	16.5	2.33	0.79	24	41	43.75
327	98RDD363	304593	5496646	4.4	-2	10.93	40	105	39376	4039	35	3.87	1.58	154	144	53.66
328	98RDD364	302593	5493611	1.8	-2	5.3	13	37	8667	1524	18.6	1.96	0.46	23	42	39.26
329	98RDD365	300978	5492345	2	-2	11.66	15	95	18414	1053	21.8	2.82	0.83	47	65	58.73
330	98RDD366	299607	5491242	2.2	-2	10.62	29	22	19953	6177	22.8	2.88	0.78	71	39	4.26
332	98RDD368	296541	5491521	2.8	-2	7.23	33	43	18335	3808	23.3	8.49	1.3	46	84	30.83
334	98RDD371	294239	5490433	3.2	4	10.48	33	52	17937	5122	30.6	3.78	1.9	53	56	14.64
335	98RDD372	292894	5489481	8.6	-2	20.96	45	27	82958	3087	30.1	7.9	1.34	107	145	15.70
336	98RDD373	293742	5487586	3.9	-2	21.12	51	35	49191	6256	34.5	3.86	1.72	100	123	14.07
337	98RDD374	292911	5485970	20	-2	8.31	50	97	11460	1263	18.6	1.78	4.69	37	40	44.07
338	98RDD375	292197	5485935	3.7	-2	9.93	32	35	13623	3916	28.7	4.45	1.5	29	86	43.33
339	98RDD376	291515	5485122	3.1	-2	10.18	32	35	12824	4187	28.3	2.56	1.58	31	84	40.00
340	98RDD377	290146	5484983	2.6	-2	9.96	33	35	13740	4650	28	2.51	1.43	31	89	36.76
341	98RDD378	294550	5485271	2.1	-2	4.5	5	16	4033	854	19.8	4.9	0.09	-5	28	42.98
342	98RDD379	297096	5486049	2.6	-2	12.05	17	88	15897	2511	43.4	2.26	0.58	53	112	44.02
343	98RDD381	297899	5487707	2.2	-2	5.26	12	62	4099	1643	26.3	3.7	0.57	16	58	54.45
345	98RDD383	304347	5494483	2.5	-2	4.44	17	37	6421	1354	17.4	3	0.28	24	65	52.53
346	98RDD384	305043	5495562	1.8	-2	4.38	11	11	5383	989	13.1	2.46	0.22	13	56	77.08
347	98RDD385	304843	5497999	1.8	2	3.93	10	25	8382	1342	13.6	2.96	0.36	23	45	45.32
348	98RDD386	302663	5501574	1.5	-2	2.8	8	19	4378	1219	14.9	2.59	0.27	9	32	52.04
349	98RDD387	297487	5502765	2.2	-2	21.04	31	31	47436	3440	21.3	3.12	1.38	134	178	39.25
350	98RDD388	294203	5502705	3.1	-2	5.86	21	23	5170	1589	15.9	3.85	0.54	43	124	74.76
351	98RDD389	293487	5502644	8.8	-2	8.35	37	56	64968	3105	19.8	3.02	1.08	203	90	47.18

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 18	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
352	98RDD391	291513	5504455	1.7	2	5.52	14	29	8373	1380	13.9	2.38	1	31	43	52.99
353	98RDD392	290372	5504834	2.7	-2	11.48	28	36	68256	1918	19.1	2.65	1.35	206	82	47.06
354	98RDD393	287025	5503509	2.7	-2	7.42	20	31	13454	1411	20.6	3.21	1.21	63	71	50.82
355	98RDD394	283476	5502905	1.3	-2	4.84	14	23	4435	769	16.3	1.67	0.66	26	51	50.87
356	98RDD395	283032	5501892	4.8	-2	13.37	33	32	182553	1686	14.3	2.07	2.04	212	54	40.58
357	98RDD396	283019	5501600	5	-2	11.54	30	27	38993	2584	21.8	4.66	2.12	105	98	35.37
358	98RDD397	281137	5502135	4	-2	5.03	18	17	27039	1138	14.3	2.03	1.66	121	78	39.10
359	98RDD398	278920	5503713	2.3	-2	5.47	12	16	6925	1260	12.4	3.31	1.14	32	88	62.12
360	98RDD399	278515	5506086	0.5	-2	3.93	12	12	11800	824	11.3	1.31	0.56	26	29	41.21
361	98RDD401	278813	5507783	2.9	-2	21.26	42	34	196945	1501	17.3	2.64	4.7	255	56	46.28
362	98RDD402	278287	5508582	1.9	-2	7.36	14	34	5038	998	18.9	2.47	1.83	55	66	62.18
363	98RDD403	278142	5508469	1.1	-2	3.87	12	27	4887	976	17	2.29	1.41	46	37	52.23
364	98RDD404	278174	5507280	1	-2	2.12	19	18	11841	971	9.7	2.18	1.32	72	31	31.32
365	98RDD405	278113	5506668	1.1	-2	2.23	15	11	12806	974	12.2	2.06	0.59	61	43	34.01
366	98RDD406	277898	5506778	1.4	-2	3.67	19	18	19230	1219	16	2.36	0.78	66	70	42.28
367	98RDD407	278133	5504757	2.6	-2	4.72	18	16	20469	1468	13.8	3.28	0.99	91	55	47.21
368	98RDD408	274307	5503848	1.9	-2	1.76	20	18	6539	989	14.4	1.71	0.63	27	34	47.86
369	98RDD409	273845	5502401	2.6	-2	23.28	34	45	59133	2592	27.9	2.8	2.33	115	147	32.59
370	98RDD411	273966	5501881	3.6	-2	33.78	33	40	68581	1987	27.2	3.3	2.45	126	157	36.33
371	98RDD412	271980	5502622	3	-2	5.91	13	23	9839	1420	13.4	4.38	2.22	38	60	56.20
372	98RDD413	271072	5502986	1.8	-2	10.74	29	38	35259	2391	21.2	3.18	2.7	152	103	43.89
373	98RDD414	270696	5503552	2.2	-2	6.15	22	29	23491	2076	15.5	3.92	1.55	88	84	41.61
374	98RDD415	270330	5504224	1.5	-2	8.56	37	30	15783	1925	17.6	2.51	6.41	84	84	54.04
375	98RDD416	269558	5504023	4.7	-2	9.65	29	31	16672	2037	19.9	3.12	6.5	88	89	40.04
376	98RDD417	270241	5501784	1.8	-2	11.94	25	24	38174	2025	15.2	2.79	2.08	82	100	31.93
377	98RDD418	270861	5500656	2.8	-2	21.25	22	28	44530	1800	13.8	5.05	1.38	127	121	45.21
378	98RDD419	269877	5500349	2	-2	3.47	8	11	6881	1195	11.1	2.48	0.4	16	45	35.21
379	98RDD421	267271	5499907	2.9	-2	11.4	22	20	32154	1923	14.4	2.29	1.48	64	104	40.89
380	98RDD422	266837	5500684	1.9	-2	4.94	16	19	15832	1639	12.8	2.6	1.52	46	73	46.58
381	98RDD423	265756	5501637	3.1	-2	15.04	26	25	39618	2461	16.5	3.33	1.7	97	130	36.75
382	98RDD424	263580	5500505	1.4	-2	2.33	11	37	12964	1335	9.9	3.24	0.88	80	63	48.03
383	98RDD425	263251	5500542	2.2	-2	9.04	28	28	37794	2451	17.8	4.35	1.51	84	93	28.65
384	98RDD426	263325	5501431	1.1	-2	5.1	18	29	10377	1352	13.6	2.69	1.27	49	50	44.11
385	98RDD427	261875	5501321	3.5	-2	30.6	43	40	159958	2352	26.8	4.57	3.54	151	155	28.22
386	98RDD428	262314	5502440	3	-2	19.35	32	37	46672	2956	16.2	4.11	2.52	78	140	38.55
387	98RDD429	261382	5502003	3.7	-2	10.54	34	37	46227	2944	22.3	4.57	3.35	77	121	51.23
388	98RDD431	261369	5500597	1.4	-2	6.59	23	32	19090	2641	19.9	3.83	1.93	50	67	36.90
389	98RDD432	260441	5500095	3.4	4	5.85	20	32	15862	2214	19.7	5.09	3.58	62	66	41.83
391	98RDD434	257401	5501347	3.6	-2	13.26	47	39	73327	3792	26.7	7.14	8.16	119	139	36.24
392	98RDD435	256936	5501572	2.9	-2	4	16	36	12211	1172	11.7	2.92	13.3	87	78	56.69
393	98RDD436	256832	5501944	1.4	-2	4.86	12	32	3503	1305	10.2	4.93	24.5	28	107	41.32
394	98RDD437	256633	5502599	2.1	-2	3.97	18	22	7234	1261	7.6	2.09	10.04	27	85	67.56
395	98RDD438	256077	5501706	1.7	-2	3.92	16	15	124562	783	12.6	5.16	6.6	142	89	64.55
396	98RDD439	256154	5500979	5.6	-2	12.32	53	53	162291	2930	20.9	7.74	22.22	339	154	47.97
397	98RDD441	256171	5500292	2	-2	3.3	15	17	20441	917	9.5	3.33	2.1	70	140	75.60
398	98RDD442	256234	5500018	1.8	-2	2.52	12	23	3444	765	10.4	4.13	2.22	24	98	76.35
399	98RDD443	255855	5500105	2.6	-2	9.01	38	44	41550	3560	23.4	6.62	10.24	122	124	41.38
400	98RDD444	255634	5499472	1.7	-2	5.34	17	19	31536	1167	12.3	3.02	5	126	61	43.20
401	98RDD445	255869	5499039	2	-2	8.76	19	27	20921	1212	13.7	3.42	5.57	69	93	45.41
402	98RDD446	256013	5498466	2.8	-2	9.27	27	42	64716	1406	14.1	4.22	9.1	94	102	62.63
403	98RDD447	255527	5498461	1.4	-2	5.3	13	24	17283	967	9.9	3.64	4.43	90	48	38.53
404	98RDD448	255131	5498075	2	-2	6.11	18	24	28502	1230	11.4	3.47	3.27	104	69	40.80
405	98RDD449	253554	5498326	1.2	-2	3.99	15	26	4202	1023	17.7	3.45	1.15	31	42	47.26
406	98RDD451	253059	5498321	2.1	-2	10.66	34	35	28466	1671	21.6	4.51	2.24	119	95	47.34
407	98RDD452	252900	5497791	1.1	-2	6.52	25	35	12738	1611	14.9	3.52	1.42	85	63	43.42
408	98RDD453	252518	5497983	1.6	-2	7.51	19	20	17350	1203	18.6	2.68	1.43	66	55	33.58
409	98RDD454	252583	5497110	1.2	-2	3.04	24	24	22377	1233	13.5	2.84	1.11	180	65	53.42
410	98RDD455	250945	5495371	1.3	-2	9.52	29	20	28180	2840	15.9	3.51	1.63	124	96	40.09
411	98RDD456	250671	5494325	2.1	-2	31.83	25	21	60469	1766	15.2	3.34	1.82	173	90	51.07
412	98RDD457	250262	5494064	1.5	-2	8.12	27	27	20436	2112	18.7	2.93	1.9	87	72	42.02
413	98RDD458	248844	5494523	1.4	-2	12.7	23	16	40594	1998	12.2	4.7	2.17	169	64	34.46
414	98RDD459	247906	5494562	-0.5	-2	7.65	19	11	22370	2124	10.5	4.7	1.79	82	44	19.91
415	98RDD461	247063	5495023	1.4	-2	5.09	15	21	34212	845	9.8	2.22	1.16	89	73	65.18
416	98RDD462	247166	5494325	2.1	-2	5.84	12	13	10340	1231	13	3.51	1.84	44	46	41.74
417	98RDD463	248287	5493301	1.7	-2	20.88	30	20	67620	2370	14.8	4	2.26	172	95	31.29
419	98RDD465	247243	5491797	1.8	-2	9.48	27	19	43525	2211	14	4	2.03	145	85	31.52

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 18	Units---->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
420	98RDD466	247240	5491039	4.1	-2	10.99	25	24	60080	2000	13.6	9.4	3	164	80	36.67
421	98RDD467	248106	5491377	2.5	-2	19.5	26	20	125217	1655	15.8	5.72	2.09	171	82	41.76
422	98RDD468	248958	5491449	1.8	-2	7.2	28	19	30195	2497	22.1	3.28	1.29	92	71	30.79
423	98RDD469	249472	5490804	1.9	-2	33.2	0	24	94902	1262	23.9	3.34	1.8	221	78	52.52
424	98RDD471	252464	5490067	3.4	-2	21.02	65	34	208242	3326	25.2	3.95	4.94	376	112	33.36
425	98RDD472	253231	5490336	4	-2	10.53	45	26	270370	2083	17	3.02	3.93	245	63	33.88
426	98RDD473	256196	5489873	1.4	-2	8.42	25	30	19820	1598	19.2	3.79	2.06	77	67	41.32
427	98RDD474	258481	5489726	3.1	-2	5	22	22	65255	1245	11.4	3.85	1.4	104	106	68.24
428	98RDD475	260695	5489317	1.6	-2	7.16	23	20	25314	2259	13.7	4.12	1.48	82	79	36.27
429	98RDD476	262719	5489451	1.4	-2	2.94	10	18	9878	865	11.4	2.56	1	24	51	48.62
430	98RDD477	266605	5489022	3	-2	5.32	16	19	13947	1450	12.3	4.13	3.31	45	58	48.15
431	98RDD478	268397	5489330	2.4	-2	4.99	16	22	17622	1208	14.8	2.97	2.12	32	59	53.63
432	98RDD479	270658	5489959	2	-2	4.71	15	15	7487	950	10.7	3.03	0.37	30	61	78.29
433	98RDD481	271906	5491409	3.7	-2	18.14	45	44	99214	2573	25.8	3.54	2.49	142	117	39.46
434	98RDD482	274490	5493395	5.3	-2	13.51	25	35	121085	965	23.7	2.24	1.98	116	55	59.30
435	98RDD483	275023	5493674	4.1	-2	11.06	24	54	30510	1621	19.6	2.71	2.19	85	59	44.25
436	98RDD484	277911	5495268	1.9	2	3.9	23	33	6014	1492	19	4.5	0.47	47	75	62.31
437	98RDD485	279188	5496499	0.5	-2	2.77	15	7	6525	2038	10.7	6.53	0.24	23	51	10.98
438	98RDD486	281017	5497440	6.2	3	7.56	10	37	19122	1993	11.7	2.51	0.87	131	162	63.16
439	98RDD487	283857	5497280	2.7	-2	4.93	14	15	8857	1321	14.5	2.78	0.48	45	59	32.42
440	98RDD488	287918	5498229	2.6	-2	5.67	13	30	7667	1020	11.8	1.91	1.4	62	56	47.26
441	98RDD489	288112	5498717	2.1	-2	5.17	12	12	5654	891	13.9	2.6	0.28	17	83	63.87
442	98RDD491	292480	5498349	3.8	4	8.08	32	56	39470	2129	20.1	2.36	1.2	169	84	69.95
443	98RDD492	292717	5498515	1.5	-2	4.88	13	38	7517	1118	13.4	1.89	0.43	51	44	44.18
444	98RDD493	296806	5498149	2.9	-2	4.77	22	26	39547	1736	13.8	3.55	0.51	260	61	60.59
445	98RDD494	298131	5499014	3	-2	6.57	21	34	12623	1551	16.2	1.52	1.04	66	48	41.54
446	98RDD495	299372	5499291	2.7	-2	5.08	17	24	5884	910	16.2	1.55	1.82	37	31	34.11
447	98RDD496	299507	5496583	2.9	-2	11.33	22	67	11975	2076	27.9	2.67	1.39	52	75	50.40
448	98RDD497	295081	5496715	3.8	-2	11.85	16	28	9852	1056	21.9	1.96	0.67	34	57	48.27
449	98RDD498	293536	5499749	8.1	-2	16.65	23	57	133735	1925	26.6	3.45	0.81	78	134	63.01
450	98RDD499	293439	5501098	1.7	-2	3.48	27	27	22202	1417	11.4	1.67	0.3	190	41	36.28
451	98RDD501	293729	5501803	2.9	-2	6.02	21	45	14561	1714	16	1.88	0.55	93	105	52.17
453	98RDD503	291173	5500517	1.9	-2	3.76	6	14	8298	1187	11.3	2.14	0.24	15	47	48.29
454	98RDD504	289084	5501346	1.4	-2	5.85	29	44	7983	2427	20.9	3.46	0.77	86	74	46.50
455	98RDD505	288566	5499897	1.8	-2	5.34	26	23	6579	2817	20.6	3.35	0.4	42	51	54.93
456	98RDD506	286270	5499659	3.6	-2	7.08	21	29	33486	1646	12.6	3.75	1.25	106	62	55.52
457	98RDD507	287927	5500017	2	-2	5.44	19	23	25197	1625	12.8	1.97	0.62	82	63	43.98
458	98RDD508	286611	5498503	3.3	-2	6.59	20	22	36482	1614	15.6	2.04	0.78	103	74	41.38
459	98RDD509	281481	5498807	1.1	-2	1.94	13	8	5513	1627	7.3	6.29	0.28	21	49	20.91
460	98RDD511	280098	5500430	3.4	-2	9.24	14	10	27375	836	10.5	3.3	0.53	49	130	66.17
461	98RDD512	280545	5500869	9.3	-2	16.26	17	20	159412	919	11	2.04	3.8	57	90	58.66
462	98RDD513	280228	5500854	2.7	-2	26.06	12	14	348497	494	6.6	1.24	0.57	99	80	50.15
463	98RDD514	278574	5501628	1.4	-2	11.86	31	34	37282	2081	14	2.43	1.73	178	108	42.34
465	98RDD516	277619	5502649	2	-2	10.88	17	56	21631	1376	13.5	4.44	2.06	98	89	57.88
466	98RDD517	277467	5502714	2.2	-2	5.91	16	40	10959	1086	16.4	3.88	1.05	86	133	68.80
467	98RDD518	277351	5502119	1.4	-2	2.69	15	15	4400	2075	10.7	6.53	1.24	18	43	31.27
468	98RDD519	277109	5501586	1.8	-2	10.95	14	23	19042	1161	15.1	1.98	1.55	64	73	48.12
469	98RDD521	276890	5501062	2	-2	6.51	14	23	15176	1035	10.8	3.14	1.35	52	93	65.29
470	98RDD522	276918	5500775	1.9	-2	3.5	20	24	5317	1716	13.9	4.87	0.86	37	113	71.88
471	98RDD523	277268	5500125	0.5	-2	2.85	11	9	14496	772	7	1.16	0.44	59	33	30.12
472	98RDD524	276321	5500311	3.8	8	9.96	19	25	27016	1459	14.8	3.09	2.08	49	82	52.35
473	98RDD525	276263	5499447	2.6	-2	4.6	17	27	12264	2006	12.3	2.81	3.36	40	81	34.99
474	98RDD526	273411	5499559	2.2	-2	2.98	7	27	6593	1066	11.7	3.43	0.42	30	99	62.59
475	98RDD527	271811	5499513	1.1	-2	3.06	7	12	4562	1459	9.6	2.41	0.8	14	38	26.63
476	98RDD528	271514	5498697	1.4	5	2.5	8	15	5207	758	9.4	3.48	0.68	25	30	36.95
477	98RDD529	270712	5498500	1.1	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	72.56
478	98RDD531	270015	5498683	1.8	-2	6.02	22	27	17359	2074	13.6	2.99	1.35	66	97	40.91
479	98RDD532	270606	5499595	2.4	-2	7.18	23	27	20698	2098	14.4	3.71	1.37	76	109	42.82
480	98RDD533	269231	5499357	1.9	-2	5.1	15	25	17840	1079	14.7	2.46	0.54	73	98	69.26
481	98RDD534	267618	5498789	3.5	-2	11.74	25	33	35657	2321	15.1	2.4	1.73	115	119	43.84
482	98RDD535	267053	5498330	2.3	-2	5.86	18	26	21181	1814	12	1.83	1.12	69	66	48.72
483	98RDD536	266429	5499306	1.5	-2	3.14	16	30	4565	1432	13	4.24	0.68	41	94	77.44
484	98RDD537	266501	5499589	1.8	-2	2.99	10	30	22696	1203	11.7	2.66	0.53	75	116	63.01
486	98RDD539	265001	5499875	1.2	-2	1.69	6	23	12034	774	9.9	2.11	0.36	25	192	85.55
487	98RDD541	263814	5499500	2.4	-2	4.61	11	21	8725	1843	12.4	4.52	1.18	51	54	52.96
488	98RDD542	264056	5499219	3.2	-2	4.9	10	20	9368	1547	11.7	5.35	1.36	72	53	44.28

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 18	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
489	98RDD543	264552	5497983	2.9	-2	8.12	28	42	41633	2889	20	2.78	1.45	113	84	36.09
490	98RDD544	262409	5498943	3.5	-2	11.4	35	27	129934	2442	16.7	2.18	1.63	241	120	50.12
491	98RDD545	262294	5499299	1.6	-2	3.31	15	21	9919	1354	10	3.09	0.61	48	92	68.87
492	98RDD546	261763	5499416	4.8	-2	6.32	26	59	38680	3156	23.7	3.89	2.53	96	57	44.90
493	98RDD547	261003	5499192	3.8	-2	15.23	48	50	152357	4246	26.2	4.11	2.65	195	125	36.99
494	98RDD548	261344	5498682	2.8	2	13.92	36	48	86511	3864	21.3	3.7	1.97	201	132	40.82
495	98RDD549	261222	5497772	3	-2	19.41	38	45	105900	3303	18.6	2.82	1.87	255	130	41.10
496	98RDD551	260062	5497504	5.5	-2	14.01	43	73	109405	4074	33.4	4.56	3.38	262	129	54.94
497	98RDD552	259179	5497663	4.6	-2	8.78	35	61	56595	4848	27.3	3.66	3.28	117	98	43.78
498	98RDD553	258227	5499475	1.4	-2	3.84	12	23	6529	1261	11.3	3.7	1.64	39	91	80.02
499	98RDD554	257409	5499583	2.5	-2	8.16	21	32	35114	3397	18.1	3.78	3.95	72	77	27.59
500	98RDD555	256767	5500073	3.2	-2	3.56	13	19	17597	2203	11.7	5.17	4.53	83	84	62.66
501	98RDD556	256561	5499226	5	-2	4.8	12	31	28847	2781	12.3	64.33	6.73	58	133	63.01
502	98RDD557	256408	5498413	2.7	-2	6.2	15	37	34062	1867	11.5	5.12	4.92	64	79	54.81
503	98RDD558	256762	5498250	1.5	-2	1.94	13	13	5432	1047	7.9	2.07	4.48	24	47	53.67
504	98RDD559	257038	5498584	1.6	-2	2.5	4	18	8429	1238	6.4	2.58	4.5	29	44	47.77
505	98RDD561	257274	5498310	3.2	-2	11.14	29	48	159376	2330	19.6	3.55	7.16	301	123	58.55
506	98RDD562	257174	5497960	4.3	-2	12.97	29	106	150402	3591	22.8	6.02	14.67	261	105	51.28
507	98RDD563	256810	5497700	2.5	-2	9.62	22	61	127597	3710	18.2	5.13	10.99	180	74	52.81
508	98RDD564	256088	5497317	3.2	-2	8.67	28	86	78641	2785	16.7	3.55	14.9	201	113	64.38
509	98RDD565	255652	5497006	10	-2	7.22	25	106	54019	2251	18.9	3.35	12.03	196	93	72.15
510	98RDD566	255707	5497309	2.4	-2	3.28	5	30	5068	1297	10.3	3.88	1.3	33	140	82.20
511	98RDD567	255839	5497778	1.4	-2	5.24	11	37	6916	1310	11.5	2.92	3.26	45	70	55.85
512	98RDD568	255277	5497397	1.8	-2	3.81	8	43	17831	1108	9.3	3.11	2.33	68	137	70.52
513	98RDD569	254791	5497607	1	-2	2.5	4	19	13022	1023	8.1	2.16	1.69	57	29	34.04
514	98RDD571	254879	5496926	2.6	-2	7.78	27	42	53724	4123	19.5	7.25	3.26	107	78	33.00
515	98RDD572	253874	5497036	2.2	-2	2.91	13	55	11950	1382	15.1	3.2	1.13	94	78	64.02
516	98RDD573	253473	5496742	2.2	-2	9.93	18	42	31501	2487	13.3	6.14	4.09	131	68	45.59
517	98RDD574	253272	5496331	2	-2	5.32	24	54	6655	2497	19.3	5.28	4.9	63	64	49.78
518	98RDD575	254117	5495422	1.5	-2	6.06	14	36	23581	1592	12.5	3.32	1.78	59	49	42.57
519	98RDD576	254999	5495655	2.3	-2	8.93	26	43	47056	4373	18.4	5.67	4.48	110	79	30.74
520	98RDD577	254565	5494780	2.3	-2	3.59	22	24	5296	1503	14.4	5.63	0.76	49	108	73.32
521	98RDD578	255295	5494410	1.2	-2	2.6	11	8	4674	661	7.3	2.49	0.25	18	70	74.91
522	98RDD579	255267	5494000	1.7	-2	6.86	20	35	37588	1729	14	3.42	2.51	153	68	65.79
523	98RDD581	255017	5493713	1.6	-2	8.77	23	28	23419	1884	14.2	4.14	2.15	125	89	48.84
524	98RDD582	254918	5493155	3.6	-2	40.81	25	24	128614	1483	13.7	7.98	2.23	223	93	51.22
526	98RDD584	253990	5492232	1.8	-2	2.07	16	22	3308	1164	13.1	6.44	1.6	23	36	62.97
527	98RDD585	253650	5492213	n/a	n/a	8.18	21	18	18179	1105	13.8	3.69	1.06	49	100	65.38
528	98RDD586	253488	5491869	2	-2	7.56	23	16	18858	1673	13.1	7.75	2.69	85	68	60.25
529	98RDD587	252120	5492023	1.8	-2	6.73	15	10	23072	1405	11.1	2.32	1.02	27	88	57.25
530	98RDD588	251586	5491867	1.9	-2	3.37	18	17	5171	1591	11.3	5	0.94	43	84	56.03
531	98RDD589	251336	5491755	1.3	-2	2.75	20	13	5186	1035	11.9	4.15	0.74	33	84	67.35
532	98RDD591	251155	5492145	3.3	-2	16.29	26	39	53183	1709	15.7	3.67	7.05	176	85	49.04
533	98RDD592	250563	5492555	1.8	-2	17.06	25	17	40562	1954	12.1	4.31	1.87	143	96	38.87
534	98RDD593	252982	5490824	1.3	-2	1.46	13	6	4249	1300	7.3	9.22	0.42	13	48	30.13
535	98RDD594	253327	5491003	2.7	-2	8.99	20	17	106776	966	11.9	3.53	1.18	81	68	62.55
536	98RDD595	254275	5491326	8.8	-2	4.9	33	29	43138	1808	13.3	23.05	5.63	116	77	54.16
537	98RDD596	256260	5491634	1.4	-2	12.18	21	23	27962	3881	20.6	3.23	1.94	59	51	6.91
538	98RDD597	257699	5491890	4.3	-2	15.95	50	37	75314	4122	26.5	4.38	2.24	135	155	43.68
539	98RDD598	259746	5491522	2.8	-2	18.01	47	38	84394	3958	24.5	3.9	3.38	146	142	30.93
540	98RDD599	262075	5492205	2.2	-2	4.84	13	7	22161	1126	11.4	2.17	0.25	24	101	51.44
541	98RDD601	267166	5493486	1.2	-2	6.27	17	13	16261	3035	12.3	2.87	0.89	55	61	20.26
542	98RDD602	267143	5493492	1.7	-2	6.77	15	27	15518	1404	18	2.11	1.31	66	57	40.90
543	98RDD603	270416	5493248	2.7	-2	14.01	33	28	74120	2659	18.7	4.03	1.71	117	147	41.11
544	98RDD604	271103	5493617	4.9	-2	7.84	18	20	29979	2237	16.4	6.85	1.87	48	67	25.99
545	98RDD605	272518	5493494	2.8	-2	5.58	22	33	16024	1951	17.7	3.56	0.98	52	87	49.76
546	98RDD606	274295	5493533	0.5	-2	2.75	18	24	12671	1234	8.3	2.03	0.86	82	96	72.98
547	98RDD607	277372	5495430	2.6	-2	9.3	32	64	23946	1375	16.9	3.88	0.62	138	121	62.82
548	98RDD608	278810	5495682	1.3	-2	5.47	26	40	9000	3615	18.7	5.12	0.92	58	81	30.73
549	98RDD609	282496	5494769	1.2	-2	3.64	8	21	7560	838	9.2	1.01	0.47	17	39	40.19
550	98RDD611	286590	5495724	3.2	-2	5.16	17	21	14464	1245	12.3	1.53	0.77	81	47	49.51
551	98RDD612	290058	5497014	2.8	-2	5.05	10	29	3088	1310	24.3	1.84	0.4	9	63	63.40
552	98RDD613	292111	5496834	8.9	-2	42.95	37	37	137691	3189	22.5	3.18	1.49	314	129	32.83
553	98RDD614	292383	5496480	2.7	-2	5.45	14	36	11682	1445	14.5	3.32	0.53	79	113	69.10
554	98RDD615	298320	5496556	3.1	-2	8.53	21	64	11429	2117	27.9	3.25	1.2	57	83	51.01
555	98RDD616	303531	5497293	1.8	-2	9	18	42	13613	2231	27.6	2.47	0.71	43	79	37.48

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
556	98RDD617	307948	5494383	2.2	-2	2.72	8	32	3179	1386	15.1	2.54	0.94	18	69	87.69
557	98RDD618	302860	5490314	1.3	-2	3.85	10	15	5862	1933	9.3	1.24	0.78	22	26	18.57
559	98RDD621	303870	5490137	5.2	-2	4.39	22	77	10047	3342	22	3.04	5.1	82	20	67.51
560	98RDD622	304899	5490321	6.3	3	6.85	20	77	12492	3007	24.8	6.58	7.34	84	36	55.67
561	98RDD623	306266	5490771	3.1	-2	7.53	19	22	12862	5217	18.3	1.9	0.86	59	42	12.52
567	98RDD629	319021	5499402	1.5	-2	4.06	17	13	6595	3471	13.2	3.67	0.3	28	56	23.11
568	98RDD631	318961	5500829	6	-2	3.22	11	25	7146	1777	10.3	2.76	1.32	37	53	68.30
569	98RDD632	318209	5501026	3.3	-2	4.87	11	53	7333	2364	21.1	2.19	0.63	27	84	57.04
570	98RDD633	318430	5501715	4	-2	2.7	6	27	2483	1124	9	5.7	0.56	22	66	60.42
571	98RDD634	318169	5502267	2.3	-2	9.38	16	21	18711	2456	14.8	6.33	0.79	53	75	25.69
573	98RDD636	319296	5503246	1.8	-2	4.71	10	84	7443	1483	21.3	1.19	0.54	30	55	49.84
574	98RDD637	319225	5503487	1.3	2	3.96	9	65	8687	1483	17.9	1.14	0.51	27	38	41.09
575	98RDD638	315096	5499938	3.2	-2	5.69	11	22	9582	3267	19.2	4.83	0.51	26	76	52.51
576	98RDD639	314277	5498733	1.7	-2	4.16	11	21	10054	1352	15	3.46	0.34	23	74	47.20
577	98RDD641	316978	5499124	3.2	-2	3.62	13	45	4132	1604	20.3	2.29	0.51	21	66	67.84
578	98RDD642	317822	5495518	1.9	-2	6.68	17	40	12977	4035	13.8	4.35	1.99	31	40	48.55
579	98RDD643	316233	5496944	3.3	-2	4.48	11	31	5422	1872	14.8	3.99	1.04	24	96	57.29
581	98RDD645	310995	5498264	1.9	-2	7.78	25	21	22478	2836	18.4	2.42	1.38	58	71	18.44
582	98RDD646	310801	5498655	n/a	n/a		6.82	9	5	11727	1288	7.7	1.18	0.41	40	38	3.19
584	98RDD648	309701	5498751	1.8	3	6.3	16	58	13852	2125	19.4	2.23	0.82	58	78	48.97
585	98RDD649	309262	5499570	n/a	n/a		12.26	20	51	19628	12500	24.7	2.51	1.83	84	32	6.29
586	98RDD651	302528	5496304	2.6	-2	5.74	12	41	7083	1499	23.7	3.37	0.89	32	52	44.22
587	98RDD652	294988	5500419	2.7	-2	3.71	17	39	10153	1828	11.9	1.9	0.76	60	41	38.26
588	98RDD653	293389	5499231	1.7	-2	6.51	17	50	10266	1436	15.5	2.54	0.95	72	78	67.84
589	98RDD654	292987	5499400	3.9	-2	7.47	18	55	12598	1517	14.9	2.04	1.25	84	76	56.81
590	98RDD655	292433	5498618	3.2	-2	7.7	19	56	22295	1731	19.1	2.21	1.27	92	77	88.55
591	98RDD656	290145	5499301	2.9	2	3.63	9	28	3944	1204	14.8	2.84	0.8	19	56	61.68
592	98RDD657	287862	5498661	5.8	-2	13.16	43	33	188740	1778	20	2.36	1.52	327	116	49.42
593	98RDD658	287270	5497384	3	-2	11.85	15	21	20880	1180	18.3	2.02	0.59	67	113	60.64
594	98RDD659	286870	5497684	4.9	-2	11.3	37	35	113580	1524	22.5	3.9	1.32	234	92	80.97
595	98RDD661	286417	5497807	2.8	-2	5.84	19	19	9796	2175	16.1	2.55	1.02	69	58	35.70
596	98RDD662	285892	5496793	2.4	-2	5.35	16	33	13822	1893	12.3	2.59	1.03	90	66	47.13
597	98RDD663	283727	5495878	3.3	-2	4.75	14	18	8987	1141	15.8	2.91	0.52	27	77	55.79
598	98RDD664	281162	5496146	1	-2	2.58	7	13	8471	851	8.9	1.15	0.27	39	42	45.28
599	98RDD665	280324	5497271	2	-2	3.57	11	18	3774	1105	10.5	4.2	0.85	24	147	78.69
600	98RDD666	279891	5499730	3.5	-2	28.96	48	29	159858	2437	20.6	2.48	2.03	254	146	38.31
601	98RDD667	279813	5499999	1.1	-2	1.56	7	12	3890	560	8.9	2.12	0.42	22	43	61.01
602	98RDD668	278725	5499601	2.4	-2	7.16	24	11	22874	1582	13	1.74	0.49	77	80	52.77
603	98RDD669	278934	5498276	1.1	-2	1.54	4	11	2245	627	8.4	0.93	0.23	11	22	36.33
604	98RDD671	275834	5498953	6.8	-2	8.44	54	38	297529	1735	13	2.01	3.73	435	85	37.25
605	98RDD672	275214	5498319	2.2	-2	5.1	15	13	7029	1373	12.9	3.54	0.47	30	79	60.04
606	98RDD673	274485	5498774	1.5	-2	2.35	17	13	2448	1065	11.9	3.81	0.45	22	99	88.93
607	98RDD674	273832	5498994	3.5	-2	11.54	24	32	26844	2279	21.6	2.8	1.93	81	96	34.77
608	98RDD675	273209	5498747	1.6	-2	4.13	12	32	7984	1222	11.6	2.2	1.39	49	46	57.87
610	98RDD677	270160	5498549	2.9	-2	9.25	33	26	70865	2979	17.3	6.54	1.9	104	119	36.71
612	98RDD679	269519	5495880	1.2	-2	6.84	18	30	32404	1057	11	2.55	0.9	151	91	60.07
613	98RDD681	268088	5495908	2	-2	3.76	12	17	7906	1445	13.1	1.7	1.28	30	32	38.92
614	98RDD682	266343	5496178	2.3	-2	8.75	19	40	19243	1450	12.7	3.56	1	82	68	42.14
615	98RDD683	264364	5495280	2.2	-2	3.21	10	13	7125	1040	10.1	1.88	0.7	48	55	51.62
616	98RDD684	263546	5495582	1	-2	2.47	14	14	13284	1205	8.8	1.84	0.51	52	34	33.32
617	98RDD685	262612	5495570	1.5	-2	2.94	17	18	8934	1374	11.5	2.72	0.74	29	46	37.59
618	98RDD686	262319	5495016	1.3	-2	9.09	27	22	36099	2179	18.6	2.15	0.98	70	104	34.73
619	98RDD687	261623	5494023	2.2	-2	4.32	15	21	10052	1212	11.8	3.76	0.9	54	52	50.82
620	98RDD688	260986	5494229	2.3	-2	7.77	24	35	34596	1437	14.1	3.54	1.53	84	114	58.80
621	98RDD689	260498	5494677	n/a	n/a		-1	-1	n/a	n/a	n/a	-5	-0.1	-0.02	n/a	-5	
622	98RDD691	260656	5495443	2.3	-2	6.8	20	41	40780	1899	15	2.27	1.48	63	85	70.16
623	98RDD692	261227	5495284	0.5	-2	4.75	8	37	3788	944	17.3	2.31	0.47	19	55	77.97
624	98RDD693	261243	5495549	2.6	-2	4.21	15	30	4025	1070	12.4	3.23	0.87	24	107	79.34
625	98RDD694	261641	5496299	1.6	-2	7.84	25	24	24858	1779	13.9	2.94	1.14	84	73	44.56
626	98RDD695	260855	5496527	1.9	-2	6.99	23	43	10214	1114	22.8	3.51	0.78	47	92	63.76
627	98RDD696	259847	5496105	3.8	-2	10.3	45	54	84801	3146	25.8	5.84	3.7	148	122	49.95
628	98RDD697	259077	5497021	3.9	-2	10.55	36	39	53451	1717	17.8	2.8	3.97	191	99	65.93
629	98RDD698	258969	5495797	4.4	-2	6.7	32	43	23034	1887	18.1	3.01	3.9	168	81	42.10
630	98RDD699	258334	5495373	1.3	-2	3.84	12	22	8361	1098	7.6	2.17	1.65	70	39	36.11
631	98RDD701	259087	5494799	1.4	-2	6.04	30	24	11801	1756	13.1	2.85	2.06	79	45	27.96
632	98RDD702	259449	5494726	2	-2	3.26	13	13	12429	975	8.5	2.96	1.31	67	42	38.73

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
633	98RDD703	258021	5494818	2.1	-2	4.02	15	14	14894	1014	10	2.19	1.44	74	44	38.63
634	98RDD704	257568	5495374	1.6	-2	2.79	12	12	6583	1002	8	2.87	1.51	34	36	40.74
635	98RDD705	257425	5495728	1.5	-2	3.2	13	12	14019	1092	8.5	1.84	1.21	52	37	34.38
636	98RDD706	256696	5495351	1.3	-2	1.48	12	11	3209	686	8.6	2.02	0.74	17	48	76.36
637	98RDD707	257140	5496206	2.9	-2	7.27	22	30	100965	1033	12.2	4.4	1.8	132	138	60.57
638	98RDD708	256882	5496482	1.7	-2	3.75	20	16	7090	1359	12	5.23	0.83	43	124	66.57
639	98RDD709	256252	5496286	2.9	-2	6.63	22	31	22021	2970	15.7	6.62	4.27	70	58	42.89
640	98RDD711	256204	5495501	1.9	-2	3.43	38	27	4031	1653	21.1	5.18	1.05	54	90	65.81
641	98RDD712	255878	5495127	5.6	-2	6.46	24	33	44982	1741	12.9	4.35	4.16	63	44	40.57
642	98RDD713	255657	5494672	7.3	-2	6.47	22	34	223544	1399	9	3.73	18.38	190	51	46.90
643	98RDD714	256504	5494560	0.5	-2	2.25	11	13	15112	940	9.5	1.48	0.56	51	33	47.94
644	98RDD715	256506	5493425	2.3	2	7.47	18	38	19538	1261	18.1	3.21	1.43	48	70	60.29
645	98RDD716	257184	5493484	1.9	-2	2.78	9	21	3229	760	10.9	1.6	0.86	17	39	48.14
646	98RDD717	257873	5492497	1	-2	2.64	24	17	21376	1379	10.1	3.13	1.04	142	67	51.86
647	98RDD718	256140	5492501	1.6	-2	3.32	21	33	8243	1325	18	2.65	1.03	52	51	45.50
648	98RDD719	255184	5492723	1.9	-2	3.61	18	21	3499	978	13	3.84	0.98	25	73	67.46
649	98RDD721	255066	5492821	1.9	-2	3.53	11	26	23942	860	7.1	1.66	2.87	41	72	76.42
650	98RDD722	254990	5492363	2.3	-2	8.55	38	25	313607	1818	11.4	3.36	2.95	311	58	33.53
651	98RDD723	255163	5492183	1.6	-2	3.24	12	27	4888	935	9.1	3.29	1.95	37	92	66.04
652	98RDD724	255134	5491513	4	-2	18.44	50	42	142869	2340	24.2	5.1	3.33	187	144	38.41
653	98RDD725	254134	5490797	2.7	-2	2.87	18	23	67177	1055	9.5	2.16	2.7	50	75	65.55
654	98RDD726	253209	5489890	3.2	-2	19.62	65	40	153475	3536	26.2	4.27	6.28	335	95	29.70
655	98RDD727	253316	5489299	1.6	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	75.42
656	98RDD728	252750	5489200	1.9	-2	2.62	13	17	18903	892	9	2.84	0.67	107	145	73.85
657	98RDD729	250686	5489535	2.1	-2	9.52	22	19	30048	2384	12.6	4.08	3.72	94	65	32.85
658	98RDD731	247444	5490225	1.6	-2	19.85	26	33	32881	1561	15.4	3.7	3.61	111	86	16.51
659	98RDD732	248413	5489146	2.1	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4.95
660	98RDD733	251124	5488613	2.1	-2	9.18	29	21	36909	2453	14.2	4.29	3.83	121	83	30.54
661	98RDD734	252348	5488635	2	-2	6.34	23	21	20856	1337	15.4	3.54	1.58	64	115	57.90
662	98RDD735	253167	5488666	n/a	n/a	-1	-1	n/a	n/a	n/a	-5	-0.1	-0.02	n/a	-5	8.57
663	98RDD736	254890	5488965	0.5	-2	1.23	8	8	3820	810	5.8	1.42	0.43	13	15	32.26
664	98RDD737	256839	5489287	1.6	-2	4.67	11	18	6322	860	12.2	4.3	1.08	33	39	46.07
665	98RDD738	257529	5489793	3.1	-2	5.2	21	12	43447	1195	11.2	3.5	0.94	162	71	50.76
666	98RDD739	258584	5490331	2.5	-2	6.9	28	35	33066	1628	14.8	3.94	2.28	112	87	57.72
667	98RDD741	259208	5492114	3	-2	16.59	65	41	87973	3394	27.8	5.26	3.04	186	148	45.18
668	98RDD742	259361	5493246	4.7	8	16.21	62	59	77692	4458	30.3	4.85	5.66	165	147	40.22
669	98RDD743	261418	5492653	2.6	-2	8.46	34	21	39984	1595	19	2.98	1.06	97	90	49.80
670	98RDD744	261867	5493440	2.5	-2	11.03	41	25	39856	2199	21.2	2.88	1.08	92	101	44.02
671	98RDD745	262498	5492960	0.5	-2	3.33	11	10	11582	719	10.1	1.74	0.4	30	39	37.21
672	98RDD748	263801	5493952	1.6	-2	4.1	18	15	8106	1144	14.1	2.45	0.6	33	59	37.67
673	98RDD747	266675	5494215	3.3	-2	8.79	22	33	9877	1506	25.4	2.7	1.53	73	73	46.79
674	98RDD748	267181	5494781	1.6	-2	4.1	17	18	7582	1157	14.4	1.9	0.76	42	44	39.12
675	98RDD749	267910	5494197	1.5	-2	2.53	12	12	3929	787	10.3	1.86	0.49	9	38	51.94
677	98RDD752	272662	5494650	3.9	-2	5.5	18	36	7927	1667	16	3.49	1.39	35	99	64.94
678	98RDD753	273137	5494154	10	-2	9.24	27	52	19082	2823	20	3.88	2.3	88	105	50.34
679	98RDD754	273795	5495266	1.9	-2	8.4	27	36	16181	1755	18.6	3.57	0.63	48	116	53.17
680	98RDD755	274130	5496549	1.9	-2	4.01	17	28	4822	1235	12.5	4.15	0.95	33	96	73.68
681	98RDD756	274584	5496755	1.3	-2	4.77	13	22	10303	963	9.1	2.01	0.79	43	68	58.52
682	98RDD757	274776	5497265	1.2	-2	1.32	10	9	1551	533	6.5	2.86	0.3	10	105	74.89
683	98RDD758	278023	5495569	0.5	-2	2.94	15	13	5026	2321	11.3	4.38	0.32	21	47	20.41
684	98RDD759	282591	5493712	1.6	-2	2.38	8	9	3807	629	7.3	2	0.21	8	85	91.17
685	98RDD761	282841	5493699	1.3	-2	1.67	11	11	2745	523	10.6	2.73	0.4	12	57	87.18
686	98RDD762	282912	5493718	2.7	-2	4.36	22	22	7057	1149	15.6	3.22	0.43	63	104	81.70
687	98RDD763	284016	5494449	1.9	-2	5.72	18	23	9479	987	14.7	3.42	0.49	32	73	65.80
688	98RDD764	286501	5496550	3.9	2	6.67	26	24	18391	1410	15.3	2.52	0.99	91	57	50.44
689	98RDD765	287512	5496942	2.5	-2	4.51	15	18	7675	1272	15	2.1	0.8	40	54	43.20
690	98RDD766	288605	5497083	1.6	-2	2.27	11	24	5935	1035	10.2	1.92	0.34	19	31	48.31
691	98RDD767	291610	5496581	1.3	-2	6.17	18	22	9219	2438	15	1.9	1.18	42	67	27.35
692	98RDD768	292422	5496162	1.8	-2	2.92	11	16	5224	1211	9.1	2.38	0.3	37	85	77.90
693	98RDD769	296808	5494793	1.8	-2	3.21	13	23	6857	1212	12.2	2.14	0.73	26	89	74.30
694	98RDD771	300264	5494336	2.2	-2	7.41	24	71	18973	2148	21.3	3.3	0.8	66	93	40.29
695	98RDD772	304077	5492452	1.7	-2	4.66	15	43	10400	1845	21.4	1.86	0.56	37	83	59.17
696	98RDD773	304945	5491516	1.3	-2	5.44	14	33	17413	1480	13.2	3.52	0.38	73	80	58.10
697	98RDD774	301648	5492781	1.7	-2	4.85	8	173	2654	852	19	2.53	0.4	12	59	43.98
698	98RDD775	298144	5489226	0.5	4	10.59	17	98	10551	2019	42.1	3.71	0.75	48	85	54.31
699	98RDD776	299669	5489125	2.3	-2	4.77	19	16	11550	3091	15.7	3.07	0.52	30	73	35.53

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
700	98RDD777	282364	5489938	2.5	-2	7.38	20	27	15182	3752	16.8	2.5	1.47	46	45	15.81
701	98RDD778	279287	5490096	2.9	-2	7.39	18	39	13350	1348	16	1.48	1.04	52	56	41.76
702	98RDD779	277207	5490250	4	-2	9.19	26	52	37671	2046	22.9	2.62	1.81	73	82	51.02
703	98RDD781	275407	5490677	3.2	-2	22.74	37	49	63854	1978	40.8	5.62	1.12	138	83	42.59
704	98RDD782	271697	5490543	3.5	-2	12.49	53	76	41299	2420	20.2	3.29	3.14	218	83	48.77
705	98RDD783	270638	5490671	2.3	-2	3.24	17	22	4056	1487	12.5	4.56	0.56	29	125	76.71
706	98RDD784	268800	5491123	3.1	-2	7.22	22	29	27762	1799	20.4	2.32	2.02	47	97	59.23
707	98RDD785	267606	5489216	5.2	3	9.16	17	24	28031	1676	16.1	12.09	1.89	41	96	66.30
708	98RDD786	267028	5489855	4.4	-2	5.02	17	20	11948	2336	13	4.04	3.94	44	55	48.35
709	98RDD787	265312	5489142	1.2	-2	5.18	23	19	23245	2042	13.2	2.72	1.05	70	71	41.23
710	98RDD788	264920	5492090	1.5	-2	5.7	18	19	13878	1905	14.9	2.57	1.46	60	58	32.30
711	98RDD789	263788	5491541	1.1	-2	6.17	20	15	16000	2908	13.5	2.61	0.94	58	59	24.97
713	98RDD792	260148	5488564	1.8	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	35.07
714	98RDD793	259587	5488732	1.8	-2	10.8	27	24	39934	2339	14.8	3.81	1.72	127	101	37.84
715	98RDD794	259981	5490183	1.7	-2	11.3	34	22	53461	2603	16.6	2.76	2.04	101	106	24.22
716	98RDD795	258930	5489422	1.8	-2	4.74	14	40	33010	982	10.2	2.5	2.26	76	64	60.71
717	98RDD796	258195	5488706	1.9	-2	12.12	25	31	49656	1772	12.9	3.73	2.68	182	78	45.54
718	98RDD797	258584	5487824	2.3	-2	4.99	17	11	9494	910	10.6	2.75	0.56	42	138	73.17
719	98RDD798	257701	5488064	2	-2	5.67	21	26	15796	1739	16.2	3.91	2.45	52	58	35.91
720	98RDD799	257982	5487131	3.7	-2	11.12	31	45	30799	2789	21.5	3.26	4.13	95	100	36.74
721	98RDD801	258356	5485791	2.1	-2	8.21	27	35	33039	2913	18.3	3.33	2.12	100	64	31.26
722	98RDD802	255913	5486747	1.7	-2	4.86	13	18	6131	1136	11.7	2.18	1.47	33	41	57.96
723	98RDD803	252996	5486179	2.3	-2	15.38	32	31	60842	3504	18.8	3.71	5.32	109	113	33.46
724	98RDD804	252241	5486102	1.6	-2	12.5	25	22	45337	2777	14.1	3.13	4.68	94	72	25.42
725	98RDD805	252793	5488307	3.4	-2	4.45	23	23	9209	3360	14.1	3.07	2.42	102	102	63.61
727	98RDD807	250704	5488376	2.1	-2	11.16	26	25	43905	3045	14.2	3.66	3.98	135	72	29.60
728	98RDD808	249633	5488344	1.2	-2	9.96	21	15	34990	2702	11.5	3.24	2.52	79	50	15.09
729	98RDD809	249060	5488072	1	-2	5.17	22	39	13041	2537	16.2	3.72	1.53	75	49	41.51
730	98RDD811	250222	5486933	1.4	-2	12.14	19	25	18328	2481	16.5	2.9	1.72	49	61	25.38
731	98RDD812	249781	5487129	1.8	-2	25.14	24	31	38892	2713	15.1	4.62	1.81	124	63	42.39
732	98RDD813	249036	5487142	0.5	-2	4.77	16	26	18953	2021	11.8	2.68	1.15	101	35	36.42
733	98RDD814	247941	5487513	1.4	-2	5.08	20	24	16732	2131	12.1	2.78	1.31	57	60	40.97
734	98RDD815	246910	5486306	2.1	-2	8.26	24	44	18723	1989	20.4	3.81	2.05	57	77	50.63
735	98RDD816	246994	5486639	1.2	-2	6.11	24	24	18965	2570	14.1	2.62	1.62	46	78	31.54
736	98RDD817	246743	5485925	4.3	-2	18.22	26	25	41592	2151	13.2	18.21	1.34	131	101	44.16
737	98RDD818	248082	5484003	2.8	-2	8.26	26	36	18666	3014	21	5.48	4.55	96	75	42.40
738	98RDD819	248761	5484304	2.1	-2	6.62	20	38	24319	2173	16.6	4.83	2.33	87	49	30.61
739	98RDD821	248909	5484595	2.3	-2	1.7	9	19	16789	679	7.2	3.64	0.53	40	122	83.79
740	98RDD822	249240	5484390	1.1	-2	5.27	15	34	4791	1187	14.3	2.8	1.25	47	59	52.54
741	98RDD823	249999	5484799	6.7	-2	10.63	35	46	59015	2416	23.2	4.01	5.05	123	71	63.30
742	98RDD824	250943	5485563	2.3	-2	16.32	30	30	94590	1693	15	3.75	3.52	164	61	43.85
743	98RDD825	252470	5484070	3.3	-2	17.71	43	33	60541	3510	23.3	4.86	5.16	129	127	38.74
744	98RDD826	251951	5483323	1.7	-2	6.68	33	38	24938	3085	20.9	5.02	6.24	71	68	27.09
745	98RDD827	250443	5482068	2.2	-2	5.38	11	11	14498	935	10.5	2.24	2.52	37	81	59.40
746	98RDD828	251007	5481511	0.5	-2	2.17	20	20	4157	2286	10.7	5.52	0.98	30	43	26.34
747	98RDD829	250781	5480260	4.7	3	13.57	43	65	67319	3245	31	4.12	22.04	211	142	63.31
748	98RDD831	249433	5480079	2.4	-2	4.04	11	16	6694	1254	8.8	2.4	5.75	38	55	57.36
749	98RDD832	248184	5481051	1.5	-2	5.73	23	21	17536	1186	12.5	3.27	6.92	63	57	34.78
750	98RDD833	247700	5482057	2.1	-2	8.65	29	26	22998	2813	17.5	4.4	9.03	58	72	36.79
752	98RDD835	246551	5481240	2.7	-2	10.27	37	27	54709	3631	20.9	5.58	10.47	86	103	34.03
753	98RDD836	247406	5479677	1.1	-2	1	9	9	5094	706	5.4	3.6	4.36	15	20	30.33
754	98RDD837	247935	5479610	2.5	-2	18.24	13	44	31811	1151	15.8	3.36	3.34	105	175	69.40
755	98RDD838	248522	5479413	2.6	-2	7.28	25	28	6507	2310	16.5	3.95	2.74	38	164	56.07
756	98RDD839	249049	5478942	2.1	-2	7.39	14	11	13192	911	11.4	1.68	2.87	33	44	60.52
757	98RDD841	249981	5478230	1.8	-2	7.28	14	14	13223	1241	14	2.83	2.03	35	101	59.61
758	98RDD842	248186	5476056	3.1	-2	8.26	32	12	45662	1384	15.3	3.11	3.43	138	133	63.59
759	98RDD843	247270	5476586	1.5	-2	4.16	15	15	9171	1314	12.5	2.56	3.42	29	44	43.39
760	98RDD844	248063	5477286	2.1	-2	6.6	24	20	20082	1737	15.6	3	7.29	48	76	41.38
761	98RDD845	250770	5477291	3.1	-2	21.82	36	28	142915	2564	15.8	3.1	6.8	238	127	38.05
762	98RDD846	251708	5477789	2.2	-2	5.38	29	20	4386	1646	17.3	5.02	0.87	31	163	69.26
763	98RDD847	251983	5477773	1.5	-2	3.93	19	16	4689	1497	14.8	3.73	1.08	26	88	56.62
764	98RDD848	252492	5479208	2	-2	2.03	17	9	2665	987	11.8	7.4	0.42	22	49	56.27
765	98RDD849	251193	5478779	2.6	-2	16.23	36	34	140112	3115	15.8	4.17	7.59	242	136	38.83
766	98RDD851	250703	5479638	3.6	-2	10.58	28	40	42538	2141	22.3	3.4	13.8	117	104	66.14
767	98RDD852	251403	5479849	3.9	-2	10.32	46	44	103722	2533	24.4	4.09	13.42	205	107	60.17
768	98RDD853	251897	5481178	4	-2	9.32	43	36	54909	2390	27.5	4.15	6.89	115	100	51.99

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
769	98RDD854	251655	5481624	2.4	-2	6.8	13	29	6614	1387	14.3	3.18	1.43	42	83	58.35
770	98RDD855	253220	5482912	1.1	-2	8.47	17	10	11853	1448	10.5	2.08	2.9	33	40	13.99
771	98RDD856	253603	5483592	2.7	-2	9.08	36	30	33994	3271	19.9	4.17	4.77	94	92	38.66
772	98RDD857	255235	5483352	1.3	-2	5.81	31	16	17106	2818	16.6	3.04	5.29	40	54	23.85
773	98RDD858	255903	5484148	2.5	-2	10	32	26	32248	2964	18.5	2.86	3.86	62	87	27.72
774	98RDD859	257469	5484275	8.6	-2	7.92	16	98	37111	3267	28.6	4.82	6.42	75	70	55.73
775	98RDD862	259845	5485292	3.5	-2	9	22	32	38472	3145	15.4	4.2	4.27	124	96	34.32
777	98RDD863	259664	5486267	2.2	-2	9.78	18	21	42148	2104	13.4	4.58	1.72	138	87	36.04
778	98RDD864	258514	5487121	2.3	-2	10.43	21	23	36455	2535	17.3	2.9	1.99	95	97	32.91
779	98RDD865	260075	5488007	1.9	-2	10.75	23	25	32328	2604	19	3.09	2.45	88	91	38.82
780	98RDD866	261377	5487456	1.5	-2	7.56	18	26	23217	2348	18.6	2.69	1.88	67	60	27.09
781	98RDD867	263251	5487601	1.5	-2	10.91	31	28	43670	4147	21.5	4.12	2.05	96	96	23.69
782	98RDD868	266693	5487536	2.9	-2	6.96	19	27	28986	1751	18.4	2.33	1.46	42	96	64.72
783	98RDD869	267202	5486894	3	-2	7.34	16	25	17609	2080	17.4	2.37	1.39	41	86	58.25
784	98RDD871	267699	5487400	1.8	-2	5.24	11	11	10135	1457	10.4	2.13	0.33	20	73	66.94
785	98RDD872	268304	5487504	1.7	-2	4.26	14	14	19756	1703	10.2	2.62	0.53	50	71	55.25
786	98RDD873	268279	5488166	0.5	-2	3.13	19	14	3757	1700	14.7	4.72	0.47	28	56	36.12
787	98RDD874	269572	5488987	1.1	-2	5.37	17	28	9116	1171	10	2.31	2.45	63	38	34.26
788	98RDD875	270436	5489161	3.7	-2	6.08	40	101	192050	1623	19.7	4.8	5.16	136	60	45.38
789	98RDD876	273725	5488972	1.9	-2	3.62	19	31	5619	1117	13.8	1.43	0.38	29	44	46.64
790	98RDD877	273735	5489347	4.4	-2	9.8	57	83	61523	2657	84.9	3.56	3.14	148	87	42.70
791	98RDD878	278281	5490101	3.1	-2	6.75	32	32	23642	2030	20	3.45	0.93	66	83	45.46
792	98RDD879	279649	5490223	3.3	-2	6.26	19	26	12592	1834	16.7	5.54	1.1	48	50	40.88
793	98RDD881	279914	5490982	1.3	-2	3.92	21	14	5711	2439	17.4	4.22	0.46	39	78	28.43
794	98RDD882	290822	5495372	2.8	-2	3.43	11	25	3693	1078	14.1	1.83	0.9	31	32	34.99
795	98RDD883	291217	5496046	2.5	-2	6.65	25	46	20803	1674	17.6	2.7	0.88	116	78	50.08
796	98RDD884	302055	5495677	1.9	-2	5.33	14	35	7804	1215	18.5	4.43	0.53	28	47	39.68
797	98RDD885	304321	5494936	1.8	-2	5.03	10	31	3636	1065	23.9	2.34	0.25	18	30	67.05
798	98RDD886	300207	5493483	2.6	-2	13.86	24	73	21934	1976	22.1	5.41	0.78	88	120	43.00
799	98RDD887	291360	5494890	8.5	-2	7.19	11	30	11354	1272	10.1	1.6	1.44	71	79	60.66
800	98RDD888	291190	5494893	2	-2	2.59	12	15	11269	947	10.4	3.09	0.24	26	100	68.47
801	98RDD889	291353	5495484	5.3	-2	9.05	47	52	92853	2689	25.6	4.75	1.28	205	112	63.09
802	98RDD891	283877	5491989	1.6	-2	7.07	23	20	16978	3469	17.4	2.9	1.26	43	63	23.23
803	98RDD892	281563	5492731	1.9	-2	4.94	13	51	4663	1192	12.1	2.17	0.84	54	80	60.43
804	98RDD893	281388	5492563	1.7	-2	3.49	12	47	4213	921	10.3	1.56	1.26	48	36	39.83
805	98RDD894	280361	5492180	4.1	-2	6.73	20	33	22952	1609	15.8	3.14	1.43	71	70	46.75
806	98RDD895	280082	5491733	5.5	-2	8.05	28	32	44226	1812	20.4	3.53	1.44	101	94	48.35
807	98RDD896	277880	5491398	1.6	-2	3.81	18	25	6379	1537	24.7	3.07	0.43	21	39	36.05
808	98RDD897	278599	5490366	2.8	-2	11.32	26	41	39028	2186	23.9	3.32	1.32	76	83	48.90
809	98RDD898	278254	5490490	2.1	-2	4.94	19	46	4741	1210	18.9	2.7	0.88	34	87	66.41
810	98RDD899	278303	5491283	2.2	-2	10.46	25	50	30274	1701	41.4	7.27	0.7	142	64	53.12
811	98RDD901	276137	5494327	2	-2	3.97	31	31	13261	990	13.3	1.77	0.57	71	79	55.81
812	98RDD902	275164	5493906	0.5	-2	1.74	14	43	2324	1183	8.1	4.91	0.72	14	31	54.96
813	98RDD903	274787	5494553	1.5	-2	5.55	24	24	7345	1786	15.8	3.48	0.4	51	67	27.57
814	98RDD904	274579	5494266	1.1	-2	3.09	17	12	5795	1830	11.7	3.77	0.28	35	63	16.97
815	98RDD905	274001	5493646	8.4	-2	19.51	39	38	20833	2016	38	1.41	3.94	111	95	43.35
816	98RDD906	271936	5492913	1.3	-2	9.4	17	48	14096	833	12.8	1.95	2.03	64	86	44.78
817	98RDD907	271900	5493121	1.5	-2	4.48	18	31	5975	2416	14.5	4.58	1.37	45	71	33.38
818	98RDD908	270652	5492325	2.4	-2	2.66	9	24	7309	980	10.3	3.82	0.4	40	207	77.83
820	98RDD911	271380	5491687	2.1	-2	8.8	33	36	54681	1998	19.3	4.17	1.73	132	108	42.49
821	98RDD912	272415	5490819	1.8	-2	7.84	22	21	25613	1382	17	2.21	1.07	72	65	40.45
822	98RDD913	273037	5490272	1.2	-2	2.66	16	10	10859	994	9.2	2.8	0.34	19	63	45.26
823	98RDD914	271581	5489868	1.4	2	2.73	22	12	4282	1830	13	3.18	0.45	30	73	29.66
824	98RDD915	271381	5489673	2.1	-2	4.72	37	26	4559	1541	19.9	4.56	1.3	47	119	56.90
825	98RDD916	271168	5490582	3.2	-2	11.46	22	40	21292	1629	16.7	2.36	2.13	96	54	53.09
826	98RDD917	270732	5490968	1.8	-2	4.42	19	58	2875	1093	13.8	3.46	2.12	23	104	74.85
827	98RDD918	270268	5490517	2.3	-2	5.04	18	24	12986	1617	15.5	3.48	0.51	41	98	61.67
829	98RDD919	269362	5490111	1.4	2	3.1	22	17	4871	2196	17.2	5.66	1.01	30	52	25.89
829	98RDD921	269185	5489549	2	-2	9.67	22	31	19401	1314	12.2	2.31	4.07	61	47	33.57
830	98RDD922	269853	5489459	1.8	-2	4.73	20	22	5720	1071	14	3.04	0.55	64	86	71.23
831	98RDD923	269611	5489750	1.1	-2	4.04	27	16	5992	2442	15.9	3.04	0.79	31	31	18.19
832	98RDD924	269745	5488035	1.6	-2	3.54	18	36	10857	1732	16.6	2.8	1.58	26	43	30.50
833	98RDD925	270181	5487965	5.6	-2	13.66	43	116	156635	2315	31.6	5.88	7.54	136	85	43.68
834	98RDD926	273423	5488410	2	-2	5.83	21	23	8586	1312	20.3	3.63	0.76	42	95	53.07
835	98RDD927	274015	5489837	4.6	-2	16.69	39	63	51798	3218	85.5	4.1	2.62	103	132	30.22
836	98RDD928	274881	5488395	3.3	-2	6.87	17	21	28338	1319	17.2	3.66	1.97	55	90	53.75

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
837	98RDD929	278684	5489397	2.5	-2	6.81	22	29	8261	1228	17.7	3.46	0.56	76	104	69.57
838	98RDD931	280930	5488833	n/a	n/a	4.96	10	10	5771	1911	8.9	2.69	0.45	20	18	3.80
840	98RDD933	282820	5490846	n/a	n/a	5.38	12	13	7453	2324	12.2	2.64	0.56	30	25	6.41
841	98RDD934	287519	5490476	3.6	-2	5.77	15	34	14072	1571	17.7	3.64	1.01	43	70	55.88
842	98RDD935	291612	5492241	24	-2	12.11	110	259	70950	2390	28.2	2.77	2.47	375	80	51.87
843	98RDD936	291701	5492494	17	-2	12.12	78	79	93823	3793	25.8	2.38	3.18	671	62	56.60
844	98RDD937	297148	5492912	1.6	-2	3.96	9	35	5332	1121	16.9	2.83	0.49	23	45	67.81
845	98RDD938	301792	5494257	1.4	-2	3.73	6	34	3162	962	18.5	2.09	0.35	8	61	59.74
846	98RDD939	293056	5491091	1.5	-2	2.88	6	11	3037	1017	8.6	2.78	0.32	9	46	37.61
847	98RDD941	291217	5491468	1.5	-2	4.96	20	19	10635	1462	18.5	3.9	0.42	59	88	52.80
848	98RDD942	284574	5490485	2.4	-2	6.47	14	14	2612	780	16.2	2.69	0.34	21	154	78.38
850	98RDD944	282981	5486304	1.8	-2	5.46	14	23	13086	2917	15.9	1.86	0.56	49	47	24.02
851	98RDD945	282123	5486010	3.4	-2	7.21	23	45	17718	2222	23.1	2.49	0.83	66	92	54.07
852	98RDD946	279754	5482255	1	-2	2.41	12	30	4937	1393	11.9	2.38	0.8	19	41	51.16
853	98RDD947	277163	5480453	2.7	-2	4.36	14	23	9900	1318	11.1	2.72	0.61	49	71	63.61
855	98RDD949	279024	5478652	7	-2	21.18	26	33	110965	1448	25.1	2.11	1.39	101	77	61.68
856	98RDD951	274237	5477640	2.9	-2	14.26	29	50	21046	3511	27.8	4.29	2.04	62	107	36.91
857	98RDD952	273342	5476108	1.3	-2	6.09	24	31	15612	3371	16.8	3.69	1.05	45	63	37.92
858	98RDD953	272302	5475677	2.4	-2	22.91	38	43	68927	3752	23.6	3.95	1.83	119	125	29.57
859	98RDD954	270688	5474920	1.4	-2	6.53	17	28	11116	1441	16.5	3.04	0.87	53	52	45.72
860	98RDD955	270688	5475168	0.5	-2	2.51	9	23	4122	1267	9.9	1.68	0.53	17	35	42.70
861	98RDD956	270515	5474133	1.8	-2	7.83	19	33	17927	1353	19	3.29	1	50	67	50.58
862	98RDD957	271158	5473208	2.4	-2	4.62	15	43	12712	8605	19.7	2.3	1.1	34	26	13.79
863	98RDD958	269966	5472520	3.9	-2	18.8	31	51	97291	3544	22.2	5.45	1.45	125	100	30.80
864	98RDD959	268910	5473664	4.1	3	13.95	28	41	42557	1707	21.9	3.23	1.14	78	128	46.22
865	98RDD961	268272	5471699	1.1	-2	4.7	25	34	15225	3543	16.3	3.54	0.88	42	55	27.07
866	98RDD962	267548	5470453	1.3	-2	4.94	28	41	17768	3614	18.5	3.71	1.15	51	61	34.24
867	98RDD963	266966	5470379	1.8	-2	6.6	22	30	6942	1766	17	3.28	0.65	37	92	58.71
868	98RDD964	267250	5469502	3.3	-2	8.72	28	52	62599	2921	22.1	4.74	1.39	106	71	39.91
869	98RDD965	266526	5468694	3.2	-2	10.62	33	67	28094	3681	25.6	4.69	1.74	109	92	43.15
870	98RDD966	266396	5468127	5.4	-2	11.72	49	56	95084	3358	26.8	3.99	2.83	142	82	42.99
871	98RDD967	265540	5468084	3.4	-2	8.87	28	51	25019	2704	23.2	3.42	2.81	85	71	55.81
872	98RDD968	266008	5467416	1.5	-2	3.03	9	14	3397	1019	9.2	1.95	0.43	22	49	59.84
874	98RDD971	263855	5466373	2.7	-2	6.5	28	33	47502	2700	18.5	4.42	1.51	103	92	61.07
875	98RDD972	263512	5467366	2.2	-2	4.06	21	22	5306	1590	14	5.15	0.49	34	84	67.45
876	98RDD973	262451	5468102	1.9	-2	6.86	28	28	8497	1629	18.2	3.87	0.51	82	127	86.67
877	98RDD974	262217	5468244	1.7	-2	5.61	22	44	10029	1957	15.9	3.07	0.59	100	120	64.53
878	98RDD975	262252	5468704	8.1	-2	4.05	22	35	13189	2318	13.2	3.22	1.58	153	102	62.93
879	98RDD976	262664	5467061	1.4	-2	4.1	24	28	8660	1778	13.6	4.56	0.91	51	77	56.24
880	98RDD977	262826	5466717	2.1	-2	3.43	28	33	6930	2189	15.6	4.52	0.95	59	77	56.56
881	98RDD978	263183	5466431	6.7	-2	9.11	30	46	18535	2435	22	5.79	6.01	102	56	66.77
882	98RDD979	263264	5465647	10	-2	10.53	49	43	34721	4216	21.3	3.7	4.44	196	66	33.58
883	98RDD981	263219	5464884	11	-2	13.17	65	42	60747	3572	19.5	3.72	5.46	211	71	50.29
884	98RDD982	262787	5464941	16	-2	11.49	63	41	101398	3280	18.7	9.84	5.73	378	86	44.94
885	98RDD983	260992	5465850	2	-2	6.44	32	29	9589	2615	16.7	4.12	1.39	63	92	51.59
886	98RDD984	261456	5464856	10	-2	3.79	21	42	23230	3100	15.8	3.5	3.48	47	32	23.83
887	98RDD985	261250	5464059	1.8	-2	2.7	19	21	5361	1147	12.6	4.74	0.49	51	111	78.96
888	98RDD986	261515	5464056	10	3	6.77	65	49	37846	3158	16.6	6.4	8.27	342	53	32.02
889	98RDD987	261952	5463676	47	-2	12.97	53	55	174149	2892	16.9	6.25	12.4	485	69	40.20
890	98RDD988	262567	5463767	16	-2	8.63	33	49	14480	2627	15.8	5.46	8.73	307	97	54.13
891	98RDD989	263005	5463491	7	-2	3.45	18	26	6719	1335	9.3	2.21	4.72	53	36	52.25
892	98RDD991	263351	5463358	4.1	-2	3.19	15	18	2923	1006	8.5	2.57	2.82	26	32	42.66
893	98RDD992	262374	5463358	1.7	-2	3.33	15	15	2472	827	11.5	2.83	0.39	26	152	82.96
894	98RDD993	261652	5462967	1	-2	-1	6	11	1849	553	5.9	2.93	0.26	10	96	90.99
895	98RDD994	261513	5462793	1.6	-2	2.66	12	16	2509	793	10	3.02	0.37	27	118	84.21
896	98RDD995	261395	5462499	2.1	3	2.2	15	26	6686	1173	11.2	3.86	0.46	37	175	78.95
897	98RDD996	261868	5462657	2.1	-2	5.43	25	27	11430	3035	18.6	4.21	1.56	69	45	36.78
898	98RDD997	262741	5462526	11	2	3.07	47	66	6705	1540	10.6	1.98	9.91	103	27	51.86
899	98RDD998	261840	5462050	1.9	-2	2	13	19	5344	1133	9.2	4.55	0.3	23	148	78.67
900	98RDD999	262058	5461661	6	-2	3.27	19	30	7692	2207	9.9	4.28	3.43	56	35	56.82
901	98RDD1001	260712	5461546	2.2	-2	4.4	20	30	6969	1358	14.9	4.33	0.53	71	156	73.01
902	98RDD1002	261574	5460722	7	-2	4.2	28	n/a	n/a	n/a	14.6	1.93	3.22	n/a	40	62.58
903	98RDD1003	262809	5461192	1.6	-2	4.83	21	28	6563	1733	16.7	2.91	0.4	48	106	72.13
904	98RDD1004	263563	5461412	2.8	-2	6.8	30	60	13666	2532	24	4.44	0.64	151	161	82.96
905	98RDD1005	263749	5461375	1.6	-2	4.48	22	23	4554	1745	16.9	3.37	0.32	38	77	70.25
906	98RDD1006	264218	5464817	1.4	-2	1.94	8	21	2334	1139	14.1	1.29	0.36	9	26	46.40

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
907	98RDD1007	263901	5465377	2.1	-2	2.81	9	13	2257	1163	7.3	3.62	0.23	9	64	77.52
908	98RDD1008	264094	5465719	1.7	-2	4.08	13	25	5422	1637	12.9	2.39	0.51	23	54	64.89
909	98RDD1009	267260	5467690	1.5	-2	4.34	25	19	7716	3626	17.8	7.74	0.38	50	67	22.35
910	98RDD1011	267971	5468733	4.1	-2	10.17	40	48	54531	2939	23.8	2.79	1.69	115	82	44.89
911	98RDD1012	268635	5470107	1.4	-2	2.82	12	19	4122	805	12.6	2.88	0.34	19	55	46.22
912	98RDD1013	270741	5471606	1.4	-2	3.54	13	27	7811	1205	12.2	1.95	0.52	32	52	48.44
913	98RDD1014	272644	5473589	1.2	-2	5.88	13	20	9390	921	11.8	1.63	0.34	28	93	73.29
914	98RDD1015	275070	5475648	1.9	-2	3.7	8	14	8421	963	9.9	2.7	0.41	21	32	42.13
915	98RDD1016	276435	5478304	3.6	-2	3.93	12	33	7245	1661	15.2	2.12	0.71	34	56	48.42
916	98RDD1017	277740	5482067	1.5	-2	6.46	17	43	7924	1557	15.4	2.02	1.05	35	72	55.13
917	98RDD1018	281033	5486690	2.9	-2	11.66	32	34	37623	4905	20	3.67	1.88	80	96	28.71
918	98RDD1019	287012	5487582	4.7	-2	4.27	8	13	6171	1181	10.5	9.15	0.48	29	71	55.54
919	98RDD1021	289375	5487279	2.9	-2	5.03	10	21	7095	1606	17.4	2.73	0.36	17	70	56.79
920	98RDD1022	313798	5491337	9.2	2	3.13	6	29	3278	1386	11.1	2.8	0.24	6	46	71.94
921	98RDD1023	313291	5491283	5.9	-2	2.23	6	38	3280	1867	10.8	3.38	0.26	10	47	72.65
922	98RDD1024	316263	5491138	10	-2	8.64	15	36	15661	2522	21.1	2.44	0.5	32	71	73.29
923	98RDD1025	315754	5490884	22	-2	7.59	15	115	15415	5130	25.7	2.93	1.79	37	80	59.19
924	98RDD1026	314587	5490836	48	5	12.24	15	200	23246	3887	32.6	4.91	1.85	40	122	53.59
925	98RDD1027	313532	5490270	6.2	4	14.85	19	195	23002	2010	34.5	2.63	0.51	92	83	54.09
926	98RDD1028	313230	5490480	5.7	3	7.56	20	105	12319	3993	23.4	4.21	0.41	52	64	37.03
927	98RDD1029	313163	5490132	3.6	-2	11.6	14	116	41099	3110	21.7	7.44	0.48	85	93	52.97
928	98RDD1031	312338	5488210	4	-2	3.79	18	39	4489	1457	21	3.5	1.29	18	72	59.18
929	98RDD1032	313750	5487040	2.1	-2	1.3	5	33	7632	2230	5.9	1.36	1.73	18	49	85.54
931	98RDD1034	318573	5489156	4.5	-2	13.91	14	n/a	n/a	n/a	23.9	6.32	3.04	n/a	75	83.96
932	98RDD1035	326927	5490808	1.5	3	10.07	26	106	16904	5430	19.2	3.1	1.55	67	74	27.25
933	98RDD1036	329876	5492397	4.3	2	3.86	8	119	5281	2963	26	4.28	0.76	14	77	61.84
934	98RDD1037	327006	5493814	2.6	-2	1.69	5	11	5068	1635	8	5.16	0.28	9	75	74.71
935	98RDD1038	326342	5495069	0.5	-2	6.91	36	19	12941	5084	19.8	3.82	0.29	68	123	25.85
937	98RDD1041	325387	5494920	4.4	-2	11.23	28	36	16284	4510	34.3	3.23	0.4	87	142	54.13
938	98RDD1042	324984	5494551	4.1	2	8.85	26	40	18647	3345	24.9	2.99	0.87	129	126	63.20
939	98RDD1043	324312	5493617	4.5	-2	10.64	35	48	18426	4866	28.9	3.04	1.29	144	116	60.68
940	98RDD1044	324043	5497193	3	-2	8.32	5	9	12041	1507	11.1	2.27	0.2	8	111	84.56
941	98RDD1045	323813	5496796	3.8	-2	3.74	3	17	22117	1368	9	2.98	0.21	17	269	86.31
942	98RDD1046	304317	5492356	2.9	-2	5.64	5	26	3210	960	16.2	3.9	0.4	12	47	43.93
943	98RDD1047	295957	5483987	2.5	-2	6.47	9	64	6972	1866	39.8	5.55	0.48	34	48	50.77
944	98RDD1048	292146	5482558	5.3	-2	5.2	11	170	8369	1528	45.2	3.04	1.72	41	53	49.38
945	98RDD1049	289753	5480929	2.1	2	34.57	28	37	45476	4294	26	2.67	1.15	112	113	27.09
946	98RDD1051	287128	5479334	1.9	-2	6.18	15	30	9091	2049	18.8	2.26	0.75	35	65	30.32
948	98RDD1053	282391	5478560	2.3	-2	5.51	13	12	8666	2518	12	4.08	0.63	26	46	11.48
949	98RDD1054	280856	5478309	4.5	-2	9.61	22	45	10062	2762	27.1	2.25	1.78	26	70	41.13
950	98RDD1055	277977	5477872	1.1	-2	2.86	3	6	4826	802	7.2	1.04	0.32	7	35	35.24
951	98RDD1056	276506	5478456	1.9	-2	6.09	17	65	8708	1954	19.1	2.68	0.9	50	69	33.76
952	98RDD1057	274903	5478345	2.6	-2	9.92	20	34	22310	3259	16.7	8.07	1	73	79	33.43
953	98RDD1058	273930	5479029	1.4	-2	2.46	7	38	4466	1260	11.2	2.02	1.13	26	47	57.31
954	98RDD1059	272438	5479600	2.2	-2	7.04	13	22	15012	1805	12.4	2.17	2.17	39	55	40.18
956	98RDD1061	271710	5479661	1.7	-2	4.25	10	33	3317	995	12	1.93	0.79	35	51	57.02
956	98RDD1062	269072	5478214	2.3	-2	7.14	8	7	23502	695	10.6	2.16	0.28	18	62	50.82
957	98RDD1063	266809	5478136	2.9	-2	7.81	27	40	21026	2109	16.5	5.35	1.32	82	95	46.58
958	98RDD1064	265625	5478411	1.7	-2	2.17	10	21	3615	982	9.4	3.75	0.42	21	89	77.93
959	98RDD1065	264088	5479252	2.2	-2	3.84	16	16	12080	1526	10.6	3.46	0.57	71	58	45.97
960	98RDD1066	263660	5479681	4	-2	24.98	16	15	207753	837	7.1	1.53	0.46	140	57	51.26
961	98RDD1067	262256	5478532	2.2	-2	8.64	28	8	164140	1030	7.7	1.22	0.47	71	142	57.35
962	98RDD1068	260633	5479009	1.6	-2	3.29	9	18	6809	851	8.5	3.05	0.87	31	35	70.82
963	98RDD1069	257425	5478300	1.6	-2	4.99	24	19	16283	1985	12.3	2.96	4.21	71	57	37.63
964	98RDD1071	257086	5477675	1.8	-2	6.48	27	24	14864	2585	11.4	3.31	3.39	134	81	46.50
966	98RDD1073	258043	5476879	1.6	-2	5.16	20	22	14690	1867	13.1	3.45	4.45	45	53	34.37
967	98RDD1074	256359	5475374	2.6	-2	4.68	20	24	15825	1567	12.8	3.23	7.1	50	67	35.38
968	98RDD1075	255353	5474544	2.3	-2	4.77	17	22	15735	1371	12.2	3.37	6.41	44	62	35.96
969	98RDD1076	253641	5473710	2.7	-2	1.88	17	16	3215	1014	9.3	2.4	6.81	28	26	33.08
970	98RDD1077	250408	5474205	3	-2	11.45	17	50	39832	1147	14	2.32	6.03	127	100	56.52
971	98RDD1078	249891	5473783	2.7	-2	4.65	19	26	8665	1286	12.3	2.35	3.84	49	68	65.46
972	98RDD1079	247276	5473999	1.8	-2	3.02	5	9	5521	850	9	3.21	1.01	10	16	57.03
973	98RDD1081	246997	5474447	1.2	-2	1.47	16	6	2606	836	8.4	4.33	0.29	13	29	36.75
975	98RDD1083	245727	5477239	2.2	-2	5.55	15	12	24001	1637	10.6	3.84	2.71	41	62	43.09
976	98RDD1084	245708	5483294	2.2	-2	5.08	19	29	12878	1715	15.6	3.46	2.56	56	64	61.71
979	98RDD1087	245851	5481807	1.4	-2	2.84	12	16	10245	1249	8.9	2.83	2.32	46	48	44.46

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
981	98RDD1089	248148	5475221	1.8	-2	3.16	20	17	14534	975	9	6.92	1.72	19	41	46.88
983	98RDD1092	253055	5475660	1.8	-2	3.79	22	21	3231	1178	15.5	4.43	3.32	36	118	68.80
985	98RDD1094	254503	5476250	1.8	-2	7.19	25	27	25874	2546	16.2	4.33	12.74	65	71	29.33
987	98RDD1096	254896	5479001	1.8	-2	9.9	22	14	36050	2338	12.2	3.02	5.99	55	73	17.21
988	98RDD1097	253606	5479929	0.5	-2	3.77	14	11	3234	1589	9.5	4.44	6.16	39	31	20.03
989	98RDD1098	255090	5480215	3.7	-2	14.16	40	31	69731	3485	19.4	7	10.03	140	130	37.05
990	98RDD1099	255501	5481503	2.8	-2	10.66	40	29	43760	4323	19.4	5.61	7.53	114	116	31.44
991	98RDD1101	256578	5481750	2.4	-2	10.76	42	31	37187	5035	23.1	4.24	7.34	85	113	28.93
992	98RDD1102	257090	5479437	1.3	-2	2.95	10	14	10044	910	8.7	1.4	2.51	44	35	31.69
993	98RDD1103	257762	5479897	2.6	-2	6.29	24	22	22628	1432	16.8	3.74	1.15	73	84	48.94
994	98RDD1104	258436	5481159	3.1	-2	8.52	25	29	38100	1352	16.8	3.58	1.85	116	114	52.07
995	98RDD1105	258111	5482592	2.2	-2	3.5	28	18	17719	1686	13.5	2.1	1	166	85	53.36
996	98RDD1106	259453	5482245	3.7	-2	14.1	28	27	69564	1498	17.2	2.71	1.92	113	114	56.97
997	98RDD1107	262153	5483645	1.1	-2	1.44	8	11	4089	791	6.4	1.93	0.61	11	23	34.60
998	98RDD1108	262121	5484242	1.3	-2	2.28	10	16	5137	819	10.3	2.87	1.07	13	38	41.22
999	98RDD1109	261548	5485036	2.1	-2	7	20	38	20722	1744	15.9	5.26	1.45	115	74	54.79
1001	98RDD1111	261542	5485460	1.2	-2	2.82	12	25	5348	1052	13.1	2.58	1.38	23	32	35.29
1002	98RDD1112	261876	5485530	1	-2	3.41	13	25	5262	1082	14.3	2.21	1.33	22	38	35.69
1003	98RDD1113	263983	5486226	1.8	-2	14.96	30	31	29289	1815	17.3	3.19	1.49	137	110	46.16
1004	98RDD1114	264570	5486047	1.8	-2	8.65	21	23	23973	1959	15.1	3.76	1.57	84	77	40.31
1005	98RDD1115	264761	5485376	1.9	-2	6.64	18	22	17394	1415	13	3.25	1.01	63	84	52.39
1007	98RDD1117	263555	5484812	2.6	-2	7.61	17	20	15044	1334	17.4	3.39	0.75	51	81	50.31
1008	98RDD1118	263799	5483242	1.6	-2	8.05	14	15	18091	1178	11.9	1.87	1.1	29	71	63.49
1009	98RDD1119	265155	5482447	1.8	-2	4.54	20	19	23254	1556	12.3	3.45	0.93	106	68	58.99
1010	98RDD1121	266156	5482742	1.5	-2	4.67	16	14	13113	1614	11.1	2.16	0.68	42	56	64.86
1012	98RDD1123	268331	5484952	2.1	-2	5.74	11	12	19947	1324	9.9	3.76	0.28	27	227	72.19
1013	98RDD1124	265989	5485094	2.1	-2	3.75	12	10	16973	1510	9.1	3.51	0.32	17	162	64.58
1014	98RDD1125	267192	5485096	3	-2	7.21	21	25	25287	1476	19.6	2.26	1.27	42	102	63.68
1015	98RDD1126	266896	5485602	2.1	-2	6.37	13	14	14780	1080	12.2	1.77	0.74	22	59	53.60
1016	98RDD1127	267550	5486484	3	-2	10.27	15	18	19519	1434	14.8	2.2	1.28	31	62	71.92
1017	98RDD1128	268184	5486817	2.4	-2	5.47	17	15	13693	1471	13.1	3.05	1	37	75	48.74
1018	98RDD1129	268767	5486336	3.5	-2	5.43	23	33	32007	1794	15.5	3.24	2.2	67	82	53.68
1019	98RDD1131	269168	5487351	3.1	-2	4.82	20	55	18824	1707	16	4.11	3.5	63	60	52.98
1020	98RDD1132	270343	5487574	6	-2	12.81	50	175	95386	3392	39.9	4.93	8.42	148	110	48.68
1022	98RDD1134	271787	5486852	2.5	-2	10.52	27	27	27061	2538	18.4	4.65	1.24	114	93	39.08
1023	98RDD1135	271873	5487133	2.4	-2	12.56	26	27	38201	2093	18.8	3.84	1.41	146	68	43.65
1024	98RDD1136	274470	5486679	2.4	-2	7.02	20	28	27703	1792	17	2.99	1.18	69	77	41.28
1025	98RDD1137	274265	5486008	2.5	-2	8.32	23	29	26433	1700	18.5	3.5	1.19	67	83	39.71
1026	98RDD1138	278247	5486478	1.7	-2	2.7	14	32	5575	1300	13.4	1.95	0.78	25	40	44.81
1028	98RDD1141	281905	5486970	4.6	-2	9.81	31	58	18235	4755	36.2	4.44	1.87	44	75	44.89
1029	98RDD1142	285178	5486272	1.2	-2	2.1	6	14	4085	1116	7.8	2.38	0.28	10	27	40.41
1030	98RDD1143	285827	5486707	2.2	-2	4.15	11	17	7262	1546	15.4	3.1	0.35	14	54	50.04
1031	98RDD1144	290795	5482984	6.7	-2	8.63	25	107	21338	2054	35.2	2.33	1.34	109	80	64.58
1032	98RDD1145	301186	5488673	2.8	-2	3.73	8	19	4429	1661	16.2	4.31	0.61	8	51	55.75
1033	98RDD1146	301948	5504174	3	-2	27.49	34	28	85182	2977	20.7	2.44	1.86	123	143	23.10
1034	98RDD1147	300959	5506989	1.3	-2	2.02	12	15	6203	860	8.6	2.22	0.43	22	30	39.46
1035	98RDD1148	298786	5507116	2.5	-2	2.73	10	45	26828	1015	10.8	3.9	0.49	81	86	64.96
1036	98RDD1149	297040	5507396	2.6	-2	3.3	10	17	8339	1083	12.4	4	0.42	21	45	43.65
1037	98RDD1151	296705	5507095	2.5	-2	9.1	22	50	17078	1820	19.9	3.08	0.77	96	72	51.25
1038	98RDD1152	294276	5503407	5	-2	14.37	26	25	61599	1541	17.1	1.85	0.49	201	178	64.25
1039	98RDD1153	294583	5504284	2	-2	2.85	11	15	4169	1268	9.8	2.84	0.5	23	84	44.10
1040	98RDD1154	295013	5505864	3.2	-2	26.84	37	29	93654	2908	21.2	3.58	1.84	167	185	40.88
1041	98RDD1155	295952	5506362	2.7	-2	23.62	27	21	55566	3192	18.8	2.96	1.63	91	148	23.80
1042	98RDD1156	296319	5506383	1.5	-2	2.04	9	16	5034	882	11.7	1.85	0.31	16	30	33.40
1043	98RDD1157	296874	5509128	2.7	-2	7.51	34	38	26001	2262	24.3	2.27	0.97	57	87	29.90
1044	98RDD1158	296161	5509962	3.9	-2	33.84	39	28	86806	3576	27	2.8	2.31	115	208	32.62
1045	98RDD1159	295233	5509574	8.1	-2	28.3	32	44	62011	3042	30.4	7.36	3.27	78	159	45.45
1047	98RDD1162	298033	5510801	1.7	-2	3.31	12	28	5953	1053	10.3	1.96	1.33	49	51	57.29
1048	98RDD1163	298040	5510997	1.4	-2	5.69	12	52	8943	1026	13.2	2	1.6	46	41	38.87
1049	98RDD1164	296545	5510826	1.6	-2	6.73	18	31	16846	960	17.5	1.7	1.04	55	58	42.43
1050	98RDD1165	299901	5511103	1.5	-2	3.45	17	35	12578	998	12.9	2.27	0.74	75	63	52.39
1051	98RDD1166	296017	5512948	2.7	-2	14.76	27	51	17276	1709	15	6.58	1.36	81	81	49.72
1052	98RDD1167	296337	5514269	2.3	-2	10.35	29	44	17076	1911	17.9	2.58	1.41	88	93	43.57
1053	98RDD1168	296278	5514929	2.7	-2	17.45	30	48	32458	1960	19.5	3.5	1.58	93	114	46.82
1054	98RDD1169	291985	5515112	2	-2	6.3	24	30	17298	1795	23.1	3.12	1.43	41	104	58.79
1056	98RDD1171	290973	5515900	1.6	-2	5.24	9	21	8388	945	9.5	3.47	1.72	22	36	43.06

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
1056	98RDD1172	290212	5516530	1.5	-2	5.13	11	19	10400	909	15.7	2.32	1.2	32	50	38.71
1057	98RDD1173	289249	5517006	4.5	-2	12.1	25	29	38020	1737	23.7	8.88	2.18	81	114	40.18
1058	98RDD1174	289526	5517927	1.4	-2	2.48	10	32	8823	877	11	2.15	1.47	44	47	50.91
1059	98RDD1175	289096	5518176	1.5	-2	2.98	10	19	7334	980	12.5	2.15	1.08	26	33	38.49
1060	98RDD1176	288217	5518272	1.5	-2	9.17	19	24	19789	1487	18.6	2.31	1.72	47	72	37.61
1061	98RDD1177	286977	5517716	1.6	-2	10.37	12	14	24811	1183	11.5	3.91	1.27	51	90	17.42
1062	98RDD1178	286273	5515683	2.5	-2	8.04	20	27	16704	1466	16.7	2.69	2.73	46	70	40.44
1063	98RDD1179	286026	5515088	2.7	-2	15.44	22	27	28982	2060	20.6	3.3	3.04	56	97	30.58
1064	98RDD1181	284330	5515412	1.6	-2	7.72	19	21	22954	1629	14.5	2.5	1.96	49	71	38.36
1065	98RDD1182	285326	5516437	2.4	-2	24.96	30	26	91948	2146	19.6	3.4	2.5	123	149	36.89
1066	98RDD1183	284070	5516522	3.3	-2	22.54	33	31	91551	2542	22.6	4.17	4.2	100	130	28.81
1067	98RDD1184	284771	5517213	2.6	-2	9.96	28	32	53032	1982	17.6	5.48	3.19	102	110	36.91
1068	98RDD1185	285031	5518292	2.7	-2	11.76	27	31	53921	1751	16	5.64	2.88	114	115	38.12
1070	98RDD1187	285896	5519930	4.9	-2	28.51	43	44	123011	3166	28.1	4.38	6.27	124	180	35.82
1071	98RDD1188	286418	5521282	3.1	-2	18.62	40	35	87232	2559	24.7	6.01	7.03	105	197	36.14
1072	98RDD1189	285624	5521985	5.5	-2	19.19	43	72	88763	4338	33.6	7.27	23.52	118	147	41.38
1073	98RDD1191	286464	5522905	3.9	-2	21.28	44	48	111070	3946	26.1	7.55	28.9	140	176	39.88
1074	98RDD1192	285114	5523196	2.4	-2	14.5	22	34	50432	1496	17.2	4.74	15.42	106	120	40.65
1075	98RDD1193	286163	5524078	4.4	-2	20.99	38	55	91692	4138	28.5	8.26	59.88	131	147	38.06
1076	98RDD1194	284738	5524799	3	-2	14.1	22	137	33639	3384	31.1	5.84	134.24	72	78	25.77
1078	98RDD1196	284543	5525732	0.5	-2	2.72	4	8	3062	490	-5	1.92	54.71	11	20	21.94
1079	98RDD1197	285606	5526324	4	-2	25.09	40	47	128385	3882	25.2	7.81	51.83	149	164	33.76
1080	98RDD1198	285311	5527202	2.9	-2	23.33	24	27	88270	2529	20.6	4.4	17.36	72	136	38.77
1081	98RDD1199	284744	5527894	1.6	-2	6.14	10	13	23685	974	11.1	2.86	4.51	38	56	35.53
1082	98RDD1201	284771	5528480	3.1	-2	11.82	21	35	68514	2412	19.4	5.97	10.28	81	106	51.95
1083	98RDD1202	284531	5529469	1.7	-2	6.26	8	18	16942	780	9	3.62	6.74	36	67	51.54
1084	98RDD1203	285449	5529895	3.5	-2	19.94	37	44	166650	2613	22.6	8.96	71.1	187	142	38.73
1085	98RDD1204	284572	5530424	1.1	-2	3.54	12	22	14627	1147	10.8	4.75	15.38	43	46	37.26
1086	98RDD1205	285623	5530945	0.5	-2	1.85	6	17	4910	670	8.2	3.4	10.43	27	18	31.64
1087	98RDD1206	284880	5531509	1.1	-2	1.69	7	22	2759	583	9	3.2	9.07	13	34	50.36
1088	98RDD1207	285625	5532108	2.5	-2	40.24	32	47	104443	1821	25.8	5.73	24.29	124	155	38.69
1089	98RDD1208	286158	5531640	0.5	-2	2.74	11	17	10879	1528	7.8	3.57	7.03	34	37	27.71
1090	98RDD1209	286596	5532329	0.5	-2	2.01	7	21	4276	768	8.9	2.03	7.57	16	23	31.23
1091	98RDD1211	285247	5533011	1.9	-2	17.69	20	44	103609	989	20.6	3.45	8.83	91	105	47.93
1092	98RDD1212	285159	5533686	1.7	-2	15.57	23	48	35413	1514	23.8	2.66	2.27	92	88	40.69
1093	98RDD1213	284976	5534574	0.5	-2	7.78	15	39	21816	2148	14.1	3.34	1.18	80	68	37.48
1094	98RDD1214	286156	5534345	2.2	-2	13.87	22	54	49429	1874	22.4	5.34	2.04	112	104	39.49
1095	98RDD1215	286067	5535370	1.9	-2	13.41	22	36	43282	2076	23.6	3.1	2.37	77	89	24.16
1097	98RDD1217	286816	5535241	2.7	-2	12.85	16	46	15960	2329	22.3	6.5	3.04	43	68	30.38
1098	98RDD1218	285813	5536184	2.3	-2	10.04	22	41	48426	1788	16.5	4.57	2.66	104	79	39.55
1099	98RDD1219	286936	5536551	2.4	-2	10.34	24	43	42302	1831	16.3	3.56	2.66	129	85	44.57
1100	98RDD1221	287390	5535773	3.5	-2	13.77	30	73	40531	2602	35.4	4.57	12.45	85	104	44.68
1101	98RDD1222	287422	5534584	1.8	-2	11.69	20	45	24393	1970	23.4	3.32	2.01	52	86	31.84
1102	98RDD1223	287925	5533800	1.7	-2	5.74	20	40	19548	1563	18.1	5.25	13.24	46	66	43.62
1103	98RDD1224	288419	5533127	1.1	-2	10.76	18	33	21729	1650	18.2	3.85	26.68	65	71	36.03
1104	98RDD1225	288186	5531484	1.5	-2	7.45	14	42	17691	762	18.5	3.75	28.42	57	58	52.54
1105	98RDD1226	287470	5529704	1.3	-2	6.4	13	13	6862	631	15.2	3.01	11.59	27	69	46.41
1106	98RDD1227	286967	5529661	1	-2	2.34	10	21	101025	1186	9.6	1.15	2.96	90	39	38.72
1107	98RDD1228	288163	5528514	2.6	-2	9.3	19	2.5	62	79	13.8	3.83	7.32	12	111	53.71
1108	98RDD1229	287811	5527791	2.2	-2	4.4	20	33	4409	1358	15.2	4.99	12.29	46	95	68.10
1109	98RDD1231	287635	5527650	2	-2	82.64	-1	17	2185	601	191.3	13.9	1.93	16	356	75.71
1110	98RDD1232	286547	5528416	1.3	-2	5.78	12	14	24039	929	11.1	2.36	10.54	40	57	29.92
1111	98RDD1233	286007	5528000	1.8	-2	17.87	24	25	56316	1702	17.2	4.36	28.09	82	108	36.66
1112	98RDD1234	287611	5526584	1.1	-2	1.88	7	14	5919	802	7.1	2.05	4.09	15	29	39.76
1113	98RDD1235	286523	5525853	1.6	-2	6.52	18	22	33415	1017	12.8	3.1	11.71	109	61	34.58
1115	98RDD1237	287140	5525188	2	-2	7.2	22	26	45067	1137	14.1	3.2	9.22	150	76	36.77
1116	98RDD1238	287726	5524640	1.8	-2	4.31	13	20	7736	1124	15.5	3.22	2.44	30	65	45.82
1117	98RDD1239	288037	5523268	5.1	-2	20.12	28	85	32836	3367	35.4	5.92	16.87	77	95	52.47
1118	98RDD1241	287462	5522497	2.9	-2	12.82	33	52	38083	3069	29.6	4.39	12.15	77	113	35.71
1119	98RDD1242	288491	5523004	2.2	-2	31.49	22	34	49908	1021	14.4	4.16	2.7	159	61	51.14
1120	98RDD1243	288989	5522457	2.1	-2	7.38	20	29	14373	1187	16.2	2.42	2.42	56	82	54.95
1121	98RDD1244	288615	5521329	1.2	-2	3.92	13	12	7173	1191	12	3.05	1.04	23	39	23.17
1122	98RDD1245	288214	5520701	2.7	-2	2.93	5	27	70571	1453	-5	1.03	0.36	153	18	41.61
1124	98RDD1247	290443	5518943	1.2	-2	4.52	12	29	7618	684	13.6	1.99	1.56	38	35	44.71
1125	98RDD1248	289577	5519555	2	-2	8.63	28	32	33084	1898	15.5	4.25	2.09	92	111	40.01
1126	98RDD1249	287473	5519532	2.8	-2	41.58	32	22	86745	2170	22	2.75	2.66	102	135	19.04

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING Method-----> Units-----> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1127	98RDD1251	287672	5517204	1.9	-2	10.76	20	26	22872	1631	19.5	2.3	1.58	52	90	38.52
1128	98RDD1252	288074	5515943	1.9	-2	6.97	20	27	17478	1345	16.4	2.56	1.62	52	65	40.65
1129	98RDD1253	289728	5515614	1.6	-2	3.68	10	17	8218	742	14.7	1.9	1	31	38	35.55
1130	98RDD1254	291141	5517243	1.8	-2	9.82	18	25	24672	1435	16.3	2.1	1.2	53	84	36.92
1131	98RDD1255	292015	5517105	2.1	-2	8.84	22	31	22918	1779	15	3.91	1.64	79	90	50.33
1132	98RDD1256	293242	5518027	1.7	-2	15.92	24	34	35003	2087	20.6	2.42	2.11	76	107	38.24
1133	98RDD1257	296264	5516672	2.5	-2	11.22	23	34	26525	1091	20.8	2.2	1.35	50	74	48.40
1134	98RDD1258	296905	5514494	2.1	-2	15.23	38	48	25667	2181	21.6	2.71	1.72	86	121	42.87
1135	98RDD1259	296869	5513238	2.2	-2	12.71	33	59	4767	1615	26.3	2.63	1.24	58	101	73.79
1136	98RDD1261	297483	5511144	3.7	-2	14.86	42	51	36332	2077	17.9	4.86	1.23	133	110	38.92
1137	98RDD1262	299056	5507858	2.1	-2	3.86	12	16	6197	929	12.4	2.25	0.32	24	60	64.19
1139	98RDD1264	304069	5489235	2.5	-2	10.71	15	23	10258	2454	13.5	6.82	0.97	23	54	50.09
1140	98RDD1265	298205	5481221	2.4	-2	7.97	14	62	4660	1496	34.6	2.72	0.46	33	70	62.01
1141	98RDD1266	292559	5478639	1.8	-2	6.25	22	35	10241	3340	26.7	2.72	0.44	24	83	34.73
1142	98RDD1267	288599	5477530	3.4	-2	8.28	19	38	10249	2605	29.8	5.77	0.44	27	110	38.18
1143	98RDD1268	283959	5476061	9.1	-2	42.73	41	53	85821	3348	29.6	4.75	1.93	190	166	40.66
1145	98RDD1271	281575	5471832	2.5	-2	6.3	18	44	5932	1524	24.6	5.34	0.7	34	59	46.69
1146	98RDD1272	280383	5471402	1	-2	3.28	14	25	5979	2230	13.9	2.49	0.56	18	36	43.69
1147	98RDD1273	279356	5469941	1.8	-2	6.77	24	48	14500	3478	21.6	3.04	1.09	64	89	44.60
1148	98RDD1274	281613	5468701	2.6	-2	13.45	27	58	17407	2158	31.6	2.78	0.84	59	120	65.10
1149	98RDD1275	281862	5467722	15	-2	47.31	27	42	125085	2804	17.3	3.87	0.87	167	77	40.08
1150	98RDD1276	280706	5467872	3.1	-2	11.43	25	37	33090	2179	25.6	2.77	0.63	56	122	58.22
1152	98RDD1278	278483	5467589	3.2	-2	5.05	14	24	3632	1417	13.6	2.1	0.59	27	90	72.70
1153	98RDD1279	278079	5467358	1.7	-2	3.95	17	22	4648	1967	17.6	3.34	0.27	24	30	62.34
1154	98RDD1281	278683	5465271	8	-2	2.05	53	33	4594	1190	-5	1.29	1.48	45	16	25.83
1155	98RDD1282	279326	5465909	11	2	4.93	45	42	5044	2240	13.9	11.22	2.32	59	37	54.01
1156	98RDD1283	281067	5466542	n/a	n/a	3.29	11	18	4799	1803	10	4.21	0.48	24	73	77.52
1157	98RDD1284	281047	5465985	2.7	-2	4.55	13	20	4096	2022	12.7	3.87	0.27	26	108	69.84
1158	98RDD1285	279708	5464635	2.4	-2	7.06	23	16	11143	5384	21.1	9.92	0.34	74	119	24.43
1159	98RDD1286	279331	5464568	2.6	-2	7.26	20	36	6115	2146	20.6	3.64	0.42	74	124	74.68
1160	98RDD1287	279584	5464324	3.3	-2	3.36	7	9	10736	891	6.1	2.7	0.26	12	144	81.70
1161	98RDD1288	279917	5464219	4	-2	4.49	9	9	3610	1062	9.3	2.74	0.33	12	86	81.36
1162	98RDD1289	280152	5464300	2.3	-2	7.05	21	26	8907	3020	20.8	3.43	0.38	45	134	59.90
1163	98RDD1291	281013	5463532	14	-2	18.89	24	23	73625	3041	29.8	4.35	0.49	135	80	63.04
1164	98RDD1292	281639	5462542	5.6	-2	7.23	15	66	19690	2481	21.5	4.81	0.62	63	58	61.18
1165	98RDD1293	280751	5460834	2	-2	4.46	7	12	3414	954	11.6	3.22	0.2	9	53	64.48
1166	98RDD1294	279315	5461927	9.4	-2	20.57	21	16	107676	4108	23.2	2.62	0.39	169	123	39.57
1167	98RDD1295	277494	5460412	4.3	-2	18.76	32	33	68983	3346	21.7	2.43	0.58	238	143	60.44
1168	98RDD1296	276120	5460081	1.8	-2	5.46	19	24	19320	3466	16.8	2.66	0.41	82	69	50.57
1169	98RDD1297	275230	5460118	2.5	-2	7.27	23	19	13375	4617	19.4	3.34	0.48	52	80	35.30
1170	98RDD1298	274734	5463181	5.1	-2	14.02	31	34	24394	3993	29.2	2.6	0.96	93	123	56.95
1171	98RDD1299	273731	5461754	2	-2	9.78	31	23	13411	5923	26.5	3.46	0.38	52	123	46.32
1172	98RDD1301	272779	5460943	2.8	-2	10.13	26	20	14506	4596	25.6	3.21	0.33	48	127	56.71
1173	98RDD1302	270423	5460057	2.2	-2	5.91	29	22	6513	3472	24.3	5.81	0.35	36	137	62.42
1174	98RDD1303	269524	5459826	5.8	-2	5.98	18	26	9705	2848	20.1	15.23	0.82	56	67	65.69
1176	98RDD1305	266665	5460747	1.6	-2	9.22	42	36	11477	5434	32.8	6.31	0.46	72	157	45.53
1177	98RDD1306	267813	5461542	2.4	-2	10.41	37	47	24653	3437	31.6	5.46	0.6	139	124	58.06
1178	98RDD1307	266718	5461996	4.4	-2	8.1	33	59	18390	3684	24	4.22	0.81	201	152	57.70
1179	98RDD1308	266191	5461668	2.4	-2	6.81	32	36	8869	4330	26.7	7.93	0.45	59	101	55.20
1180	98RDD1309	265649	5461658	2.3	-2	9.43	39	48	16289	5230	32.7	4.95	0.72	58	116	60.26
1181	98RDD1311	264478	5460795	19	-2	8.7	30	36	92104	2175	13	11.37	3.95	230	53	47.41
1182	98RDD1312	264013	5460236	11	-2	10.71	35	34	28871	2882	17.7	2.48	2.95	106	52	46.31
1183	98RDD1313	263979	5461337	3	-2	14.35	34	55	30504	3165	29	3.39	0.85	136	163	53.94
1184	98RDD1314	264544	5461565	2.5	-2	8.4	27	29	10915	2472	20.3	4.56	0.74	113	113	61.80
1185	98RDD1315	264545	5462701	2	-2	3.06	-1	47	11294	4478	24.2	66.11	1.01	108	85	55.64
1186	98RDD1316	265175	5464913	2.4	-2	5.03	12	28	5021	1524	18	3.44	0.47	30	29	56.86
1187	98RDD1317	265568	5465061	2.4	-2	5.92	18	23	7543	1640	16.5	2.78	0.45	55	41	70.51
1188	98RDD1318	264950	5465805	2.6	-2	5.06	14	19	7675	1408	14.2	4.49	0.31	32	45	63.36
1189	98RDD1319	268540	5467464	3.2	-2	7.45	15	31	13413	1856	16.3	7.19	0.69	38	83	60.33
1190	98RDD1321	268534	5468377	2.1	-2	6.5	16	30	9551	1590	15.2	2.98	0.68	31	77	60.06
1191	98RDD1322	267808	5468294	2.1	-2	5.98	18	26	4476	1357	15.8	3.06	0.44	37	185	82.59
1192	98RDD1323	268120	5469157	6	-2	11.28	41	36	156265	1681	19	1.94	0.7	152	92	48.59
1193	98RDD1324	268185	5469745	2.6	-2	4.71	21	27	8356	1864	16.7	4.07	0.4	64	140	66.93
1194	98RDD1325	270401	5471133	1.9	-2	6.02	21	43	15756	1654	13.9	2.98	0.67	95	80	54.16
1195	98RDD1326	270636	5470234	1.2	-2	2.52	11	27	6599	998	9.7	1.87	0.45	30	35	39.47
1196	98RDD1327	271342	5470436	1.7	-2	6.18	21	48	16840	1802	13.8	4	0.75	116	81	57.54

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING Method—> Units—> Detection Limit—>	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1197	98RDD1328	271377	5470619	1.9	-2	3.43	10	24	12481	1703	8.7	8.29	0.58	34	26	83.33
1198	98RDD1329	271474	5470788	1.9	-2	5.48	12	34	9262	1273	12.1	1.92	0.76	50	91	58.97
1199	98RDD1331	271597	5472004	2	-2	7.84	22	31	15635	2050	19	3.33	1.1	54	95	46.76
1200	98RDD1332	272355	5472187	3	-2	8.84	21	38	26223	2744	21	4.34	0.93	71	90	59.65
1201	98RDD1333	272558	5471710	1.8	-2	9.69	13	13	286124	519	7	0.6	0.28	83	31	45.01
1203	98RDD1335	271641	5470322	1.7	-2	10.75	26	32	23209	3447	21.6	3.3	0.82	70	75	34.57
1204	98RDD1336	271267	5469851	5.4	-2	17.18	41	57	53227	4097	33.4	4.12	1.41	111	108	33.72
1205	98RDD1337	270822	5469644	4.7	-2	19.59	49	52	82669	3186	30.2	2.97	1.22	146	135	41.73
1206	98RDD1338	271165	5468974	4.5	-2	13.98	41	34	62600	3297	27.3	3.94	0.96	112	102	33.07
1207	98RDD1339	270744	5468123	5.5	-2	7.29	25	33	17527	4343	21.6	4.46	1.78	73	56	31.51
1208	98RDD1341	269670	5467532	2.8	-2	7.72	24	52	16787	2433	20.7	2.5	1.41	56	68	39.28
1209	98RDD1342	270454	5467320	4.9	-2	5.61	35	39	12005	1923	17.2	1.98	1.79	79	60	47.23
1210	98RDD1343	271282	5466648	2	-2	5.51	27	28	7090	3239	23.3	5.12	0.66	51	124	61.52
1211	98RDD1344	272000	5465946	2.3	-2	5.03	31	26	7684	3583	22.6	9.16	0.43	53	74	45.40
1212	98RDD1345	273267	5466944	4.1	-2	7.29	28	23	28097	2499	12.2	4.2	2.08	104	83	43.19
1213	98RDD1346	273500	5466907	1.6	-2	3.92	17	20	6078	2586	17.4	3.33	0.27	27	64	46.27
1214	98RDD1347	274344	5467201	2.8	-2	6.04	23	34	10590	3531	18.9	2.6	1.44	59	67	38.64
1215	98RDD1348	275299	5465659	2.4	-2	4.18	19	43	12531	3355	15.7	3.33	0.84	66	136	55.02
1216	98RDD1349	275584	5467207	2.1	-2	3.96	17	21	4678	2016	13.8	3.33	0.45	35	83	64.51
1217	98RDD1351	275873	5468227	33	-2	16.59	30	50	48538	4784	23.7	2.6	5.72	75	108	45.66
1218	98RDD1352	274337	5468014	3.1	-2	11.35	23	34	20964	2778	17.5	2.85	1.21	114	71	46.57
1219	98RDD1353	273097	5468185	5.1	-2	23.25	39	30	45766	3564	21.3	3.21	2.59	118	139	41.69
1220	98RDD1354	272962	5469298	3	-2	6.68	17	43	28353	815	11.9	2.2	0.45	59	192	76.98
1221	98RDD1355	273113	5469702	3.7	-2	10.4	22	23	24920	1720	22.8	2.91	0.56	64	106	51.28
1222	98RDD1356	272914	5470243	3.5	-2	66.87	15	20	119671	608	12.7	1.69	0.28	56	149	62.56
1223	98RDD1357	274062	5470199	1.7	-2	5.37	16	24	27718	1152	11.6	2.74	0.4	76	69	56.20
1224	98RDD1358	274467	5470152	2.7	-2	13.49	13	34	110007	835	11	1.85	0.38	115	83	61.96
1225	98RDD1359	275748	5469252	6.4	-2	12.01	47	82	29660	3347	30.7	3.44	5.17	136	167	45.24
1227	98RDD1362	278245	5469048	13	-2	19.83	43	61	91144	2809	23.3	3.57	3.58	195	161	45.23
1228	98RDD1363	279841	5472953	1.9	-2	7.9	27	67	14129	2638	24.9	3.4	1.8	64	79	49.98
1230	98RDD1365	285355	5481585	1.8	-2	7.88	21	28	10654	4807	16.8	2.23	1.11	39	45	17.12
1231	98RDD1366	288197	5483420	1.8	-2	8.24	23	26	11325	3987	19.6	2.31	1.12	29	75	29.30
1232	98RDD1367	307694	5499434	2.2	-2	3.06	7	24	3665	1031	11.9	2.76	0.58	21	44	47.25
1233	98RDD1368	306383	5492831	2.9	-2	4.69	9	40	5864	1694	22	4.62	1.5	21	66	58.14
1234	98RDD1369	295158	5483880	2.9	-2	6.34	7	46	6090	1406	32.6	4.22	0.24	26	33	53.89
1235	98RDD1371	286107	5484089	2.7	-2	14.22	25	30	25486	4489	24.1	5	0.85	67	95	26.75
1236	98RDD1372	281924	5484715	2.5	-2	5.12	12	32	6176	1416	18.4	3.51	0.8	22	48	46.81
1237	98RDD1373	278327	5485199	2	-2	5.7	17	18	11631	2422	11.5	3.74	1.91	27	52	28.48
1238	98RDD1374	277338	5483825	2.4	-2	3.39	14	38	6754	1403	15	2.33	1.38	45	57	52.90
1242	98RDD1378	274050	5484248	1.4	-2	3.72	11	29	8507	1434	12.9	2.04	0.58	31	80	57.76
1243	98RDD1379	272073	5485922	1.9	-2	8.2	23	20	15341	3048	17	2.76	1.04	55	67	29.90
1244	98RDD1381	270984	5486017	2.7	-2	5.14	29	33	17116	2331	17.4	3.52	1.34	91	93	47.20
1245	98RDD1382	269441	5486030	1.5	-2	3.63	15	37	3631	1316	13.3	2.84	1.02	33	96	55.12
1246	98RDD1383	269945	5485074	3.9	-2	14.85	27	33	72475	1624	17.4	4.3	2.19	131	82	49.32
1247	98RDD1384	269072	5484580	2	-2	4.08	17	25	4373	1292	14.7	3.95	0.44	50	133	78.44
1248	98RDD1385	268744	5485203	1.8	-2	6.83	37	46	10781	1981	23.4	4.22	0.74	164	104	62.96
1249	98RDD1386	268241	5484546	3.1	-2	13.2	32	31	45882	2268	21.8	3.6	1.44	94	152	51.89
1250	98RDD1387	268011	5483741	2	-2	6.07	25	29	5638	1553	17.5	3.81	0.46	94	102	70.70
1251	98RDD1388	268053	5483302	2.6	-2	4.37	16	18	15251	1328	12	4.64	0.46	56	79	60.65
1252	98RDD1389	268081	5482493	8.5	-2	16.34	35	56	170350	2362	24.2	5.35	3.97	168	95	41.47
1253	98RDD1391	268582	5482897	1.8	-2	3.18	10	15	7516	1454	7.9	3.55	0.48	17	52	56.88
1254	98RDD1392	269083	5482516	4.3	-2	11.11	52	58	20858	2096	39.1	4.62	2.37	64	95	38.67
1255	98RDD1393	269311	5483581	1.5	-2	9.91	29	26	20386	2724	16.8	3.65	1.51	90	73	36.13
1256	98RDD1394	269624	5483500	2.7	-2	10.27	23	39	30020	1335	16.7	2.24	1.25	244	76	47.85
1257	98RDD1395	270071	5483123	1.3	-2	5.66	25	25	15509	1787	15.3	2.78	0.92	72	78	41.94
1258	98RDD1396	270965	5483021	1.6	-2	3.27	11	16	4498	1211	11.7	2.79	2	21	51	42.83
1259	98RDD1397	271757	5482229	2.1	-2	2.88	14	25	10672	847	13.8	3.09	2.7	43	92	69.45
1260	98RDD1398	273112	5481537	2.3	-2	12.07	25	29	33713	3201	16.1	4.77	1.93	70	92	30.95
1261	98RDD1399	272182	5480875	2.1	-2	10.96	17	37	9243	1168	18	2.4	0.84	54	132	67.02
1262	98RDD1401	271967	5479752	2.5	-2	10.35	27	33	9695	2135	22.1	4.16	0.57	102	129	51.87
1263	98RDD1402	269490	5481571	1.9	2	4.34	20	22	11792	939	16.3	1.7	1.01	34	53	59.73
1265	98RDD1404	268640	5481980	2.5	-2	17.84	32	54	33873	1492	24.1	2.83	1.92	78	110	38.16
1266	98RDD1405	268131	5481215	2.4	-2	7.45	18	19	19113	1001	13.5	4.16	0.78	52	54	30.44
1268	98RDD1407	267373	5481162	4.6	-2	5.14	24	45	256987	834	9.7	1.62	2.98	137	36	31.61
1269	98RDD1408	266885	5481343	10	-2	11.85	80	120	186871	2455	25.6	3.86	5.27	380	83	42.05
1270	98RDD1409	266619	5481899	2.2	-2	3.32	16	17	3347	955	16.9	3.44	0.73	21	94	68.53

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1271	98RDD1411	266112	5481311	4.2	-2	4.56	22	17	4629	956	18.1	4.43	1.13	43	72	72.16
1272	98RDD1412	265603	5481340	3.2	-2	25.55	18	14	159998	735	10.5	1.06	0.35	112	115	55.72
1274	98RDD1414	266480	5480307	1.2	-2	3.81	19	20	7020	2201	14.5	4.43	0.56	45	87	35.67
1275	98RDD1415	268346	5478775	2.3	-2	4.72	23	38	8537	2017	20	4.51	0.94	69	102	57.77
1276	98RDD1416	271211	5477695	1.3	-2	5.66	12	16	9009	2156	10.4	2.97	1.71	28	37	21.35
1277	98RDD1417	272310	5476996	2.2	-2	3.3	9	18	4907	1082	12.3	4.14	0.61	16	42	47.36
1278	98RDD1418	274871	5476012	1.8	-2	52.87	6	18	211295	650	8.3	0.68	0.22	39	73	49.60
1279	98RDD1419	275292	5476371	4.8	-2	6.13	17	36	14786	1738	17.2	11.09	0.54	72	113	62.35
1280	98RDD1421	275078	5476757	6.2	-2	4.96	11	39	8148	1609	13.4	26.3	0.82	31	79	67.38
1281	98RDD1422	275945	5476498	3.2	-2	8.69	16	33	25494	1345	16.8	3.71	0.8	49	88	56.69
1282	98RDD1423	276273	5477938	18	-2	16.29	27	71	186160	2470	27.9	6.99	1.49	143	74	39.47
1283	98RDD1424	274701	5480648	2.1	-2	5.69	13	30	13484	1311	14.4	3.68	1	37	67	67.19
1286	98RDD1427	280163	5481538	2.9	-2	9.15	17	30	14283	3001	21.1	4.5	1.1	35	77	33.03
1287	98RDD1428	280751	5481344	2.4	-2	12.46	25	38	23771	3736	23.7	3.51	1.1	72	110	41.78
1288	98RDD1429	281791	5481773	1.5	-2	11.24	20	28	20491	3292	19.4	2.7	0.91	57	91	31.35
1289	98RDD1431	282965	5481149	2.2	-2	10.86	27	49	15212	3440	26	2.94	0.79	48	67	37.19
1290	98RDD1432	283367	5482436	3.3	-2	10.11	25	45	15664	3424	29.1	3.31	1.19	42	81	45.27
1291	98RDD1433	284654	5483113	2.5	-2	15.55	28	38	27979	4180	25	4.46	1	76	95	35.28
1292	98RDD1434	291264	5481411	5.9	-2	8.09	37	217	10394	2132	33.3	2.06	3.63	86	70	44.63
1293	98RDD1435	292484	5483459	6.9	-2	12.14	46	138	35723	3977	39	2.43	2.14	82	61	43.38
1294	98RDD1436	303406	5486776	2.3	-2	16.71	13	21	12572	2333	12.6	9.64	0.68	33	71	40.92
1295	98RDD1437	296195	5481828	1.8	-2	6.96	27	74	4544	1616	39	2.49	0.44	35	170	65.27
1296	98RDD1438	295399	5480887	2.5	-2	6.95	24	23	9660	5157	21.2	4.13	0.59	22	91	30.43
1297	98RDD1439	291609	5480048	3.3	-2	6.75	21	37	9042	2074	21.7	5.59	0.88	49	81	40.22
1298	98RDD1441	290593	5479830	2.5	-2	4.78	14	18	5679	1409	18.4	4.66	0.31	21	57	54.61
1299	98RDD1442	288625	5480556	3.4	-2	32.53	40	51	41494	4574	37.6	2.62	1.54	106	143	33.32
1300	98RDD1443	287391	5478160	6.1	-2	29.66	27	53	46262	2556	20.9	7.07	1.16	146	105	46.36
1301	98RDD1444	284368	5476413	2.2	-2	2.75	12	14	6588	1696	7	9.8	0.59	13	45	59.23
1302	98RDD1445	282123	5475799	6	-2	5.31	7	33	6534	2424	25.9	0.43	3.61	18	7	90.11
1303	98RDD1446	281260	5478511	2.9	-2	8.51	30	38	13939	3747	25.6	1.96	1.22	29	90	34.86
1304	98RDD1447	282086	5480455	2.2	-2	13.97	28	47	17070	3507	29.5	2.27	0.88	55	95	36.51
1305	98RDD1448	280067	5480272	2.7	4	15.71	22	32	17233	5172	25.7	2.23	0.98	46	61	13.20
1306	98RDD1449	280809	5477456	1.8	-2	5.85	19	18	9045	3430	15	1.55	0.86	28	49	17.00
1307	98RDD1451	280177	5475512	4.6	-2	13.73	24	40	12054	2770	19.9	2.26	1.7	41	80	37.09
1308	98RDD1452	278770	5475034	1.7	-2	3.58	17	28	4041	1372	17.8	2.72	0.64	34	50	59.00
1309	98RDD1453	274692	5472416	2.8	-2	18.75	22	20	50352	1854	14.6	2.58	0.46	81	111	41.56
1310	98RDD1454	273586	5473303	10	-2	11.12	18	22	28631	2014	21.3	2.79	0.58	31	191	64.36
1311	98RDD1455	273385	5473493	4.9	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	43.86
1312	98RDD1456	273029	5473015	3.3	-2	5.86	9	17	12815	998	9.8	1.46	0.35	28	51	72.36
1313	98RDD1457	272433	5472905	2.3	-2	5.34	17	40	4472	1729	16.2	4.38	0.88	37	149	76.29
1314	98RDD1458	271975	5473024	-0.5	-2	2.93	17	27	10778	1755	14	2.4	0.64	55	52	55.56
1315	98RDD1459	272324	5473868	2.2	-2	5.17	11	35	9025	1609	12.8	4.07	0.59	44	64	50.41
1316	98RDD1461	272244	5474541	2.2	-2	8.15	18	42	15723	2064	16.5	3.57	1.09	52	72	44.43
1317	98RDD1462	269867	5475693	3.5	-2	6.64	19	29	17460	3402	15.8	2.79	2.65	50	55	33.28
1318	98RDD1463	269065	5475686	3.5	-2	11.56	373	28	19121	2662	29	15.41	3.6	49	79	47.78
1319	98RDD1464	268611	5476003	2.7	-2	19.08	-1	17	11764	1533	50	19.86	6.66	41	110	43.49
1320	98RDD1465	267520	5475377	4.3	-2	17.66	-1	29	14691	2513	45.8	21.68	4.39	50	96	49.66
1321	98RDD1466	268781	5474782	2.8	-2	14.23	457	23	7644	1618	36.5	12.9	5.34	18	76	47.72
1322	98RDD1467	267222	5473769	4.2	-2	16.63	-1	34	26536	4557	41.3	18.33	2.6	74	100	30.97
1323	98RDD1468	268172	5475526	1.7	-2	5.8	12	20	23855	1177	11	3.66	0.92	41	93	62.32
1324	98RDD1469	265586	5475010	4.9	-2	4.86	14	20	21615	2093	10.6	4.19	2.59	33	42	48.95
1325	98RDD1471	264551	5473807	2	-2	3.14	17	18	9007	1623	11.5	4.16	0.53	43	94	70.62
1326	98RDD1472	263540	5473076	2	-2	2.82	11	11	8446	1808	8	4.98	1.24	34	46	25.22
1327	98RDD1473	264062	5474628	1	-2	2.21	11	16	2952	704	10.1	3.11	0.38	29	104	87.42
1328	98RDD1474	264610	5476529	6.1	-2	11.18	26	34	28814	2667	19.4	5.71	3.07	69	123	56.11
1329	98RDD1475	265133	5476867	3.7	-2	8.45	35	37	37601	3488	20.9	4.77	3.04	101	101	45.49
1330	98RDD1476	265912	5476451	2.2	-2	4.26	10	15	11759	1376	8.6	2.85	0.7	28	75	73.48
1331	98RDD1477	266160	5476377	1.8	-2	2.4	14	20	13542	1303	10.1	2.7	0.74	51	87	54.78
1332	98RDD1478	266669	5477459	2.4	-2	10.98	30	23	14569	2630	23.2	4.04	0.54	68	101	48.14
1333	98RDD1479	266073	5478362	3.5	-2	6.38	11	52	37991	1006	16.1	5.14	2.12	45	81	64.91
1334	98RDD1481	265665	5477909	5.3	-2	13.6	29	60	207323	1725	22.1	3.57	3.56	135	71	39.29
1335	98RDD1482	264890	5477802	1.5	-2	5.72	14	24	10625	1568	12.9	3.54	0.91	73	90	63.57
1336	98RDD1483	264737	5479260	1.5	-2	8.1	14	30	20838	1644	14	3.58	1.42	58	70	49.43
1337	98RDD1484	265228	5479803	2.1	-2	9.4	12	45	11715	1746	12	1.87	1.5	53	125	57.74
1338	98RDD1485	265976	5479397	1.9	-2	5.03	19	26	7729	1103	13.8	3.32	0.6	69	127	73.32
1339	98RDD1486	266050	5479154	2	-2	6.94	18	26	4279	1276	14.9	3.53	0.63	69	147	74.21

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1340	98RDD1487	266149	5480094	2.5	-2	5	28	35	27703	2717	18.4	4.2	1.02	99	108	50.44
1341	98RDD1488	266560	5479460	3.3	-2	5.33	10	33	229952	909	9.7	2.22	1.5	70	33	43.61
1342	98RDD1489	266036	5478899	1.4	-2	3.9	14	22	4006	1740	10.1	3.32	0.41	49	118	44.15
1343	98RDD1491	266727	5478772	4.8	-2	10.5	51	60	189721	3217	20.1	3.48	2.47	328	76	35.97
1344	98RDD1492	267427	5478576	2.8	-2	9.06	33	52	35437	2073	17.7	3.1	1.97	145	70	39.19
1345	98RDD1493	267812	5478209	1.8	-2	4	17	23	3614	1098	14.2	2.38	0.45	42	76	73.70
1346	98RDD1494	267569	5477719	2.3	-2	5.18	19	26	15764	1598	14.4	3.4	0.47	88	78	62.13
1347	98RDD1495	269592	5476593	1	-2	3.74	13	35	7488	1488	11.7	3.37	1.21	47	59	66.52
1350	98RDD1498	273154	5475077	1.7	-2	6.07	14	45	22868	1683	13.9	3.29	0.98	31	68	63.08
1351	98RDD1499	273900	5475352	2.8	-2	13.73	36	62	174733	3208	24.2	3.18	1.22	128	72	38.30
1352	98RDD1501	274173	5475266	4.2	-2	14.19	28	57	207906	2267	20.1	2.71	1.21	147	59	40.07
1353	98RDD1502	274442	5475056	3	-2	5.74	21	24	8093	1856	20.5	3.32	0.43	42	108	63.49
1354	98RDD1503	274762	5475059	1.9	-2	9.28	27	35	11588	1940	21.6	2.53	0.59	75	120	57.11
1355	98RDD1504	273696	5474409	1	-2	4.24	22	38	5050	2124	22.2	3.06	0.44	41	80	60.22
1356	98RDD1505	275956	5474197	2	-2	4.39	16	21	13670	1407	14.2	2.26	0.49	51	56	49.24
1358	98RDD1507	277224	5472952	0.5	-2	3.36	24	18	4918	2574	15	4.66	0.32	39	29	30.29
1359	98RDD1508	277077	5472045	5.7	-2	9.85	23	40	14599	3196	22.3	2.18	1.63	50	65	25.54
1360	98RDD1509	276568	5472276	2	-2	10.07	20	43	35623	1374	17.8	2.52	0.84	167	46	62.64
1361	98RDD1511	274958	5471748	2.4	-2	5.64	14	39	14889	1277	14.6	2.84	0.6	69	82	67.20
1362	98RDD1512	275887	5470510	5	-2	10.82	26	33	18780	2590	18.8	3.51	1.78	57	87	42.87
1364	98RDD1514	277730	5471424	17	-2	29.57	36	55	113856	2853	28.8	3.64	2.66	205	147	38.65
1366	98RDD1516	279248	5472549	2	-2	4.88	20	47	9864	3087	20.8	2.25	1.68	30	80	51.01
1367	98RDD1517	280819	5473589	3.6	-2	10.4	36	59	22739	4298	26.3	2.95	2.54	79	138	34.06
1369	98RDD1519	285236	5476145	10	-2	47.24	24	48	92657	2614	25.6	4.45	1.5	184	126	40.61
1370	98RDD1521	286308	5476906	6.9	-2	39.79	28	49	72324	3084	23.4	4.5	1.28	170	126	39.59
1371	98RDD1522	289150	5475460	0.5	-2	1.34	6	15	2804	1074	6.4	1.5	0.25	8	16	32.91
1373	98RDD1524	290072	5477750	4.3	-2	10.72	17	79	15155	2688	34.2	2.29	1.54	46	77	47.03
1374	98RDD1525	289866	5478470	1.8	-2	8.99	17	37	17010	1857	22	1.74	0.65	41	93	37.06
1375	98RDD1526	291944	5481132	1.6	-2	3.7	23	39	7150	2443	21.6	3.05	0.31	72	110	70.21
1376	98RDD1527	303244	5506885	2.6	-2	3.71	13	23	8229	1537	16.8	4.11	0.58	34	38	54.12
1377	98RDD1528	299735	5509381	2.2	-2	2.93	9	24	5152	1370	13.4	2.04	0.52	18	32	38.91
1378	98RDD1529	299657	5510548	2.5	-2	6.03	16	53	8566	1341	13.7	2.02	1.13	58	45	41.51
1379	98RDD1531	297376	5512707	4	-2	12.44	22	75	29604	1919	17.8	3.83	0.83	103	121	57.61
1380	98RDD1532	297347	5513878	3.6	2	16.42	25	55	35205	1333	22.5	2.94	0.43	139	192	71.46
1381	98RDD1533	297679	5515063	2.7	-2	5.85	14	33	6687	1392	16.9	3.26	0.84	29	40	41.14
1382	98RDD1534	294644	5517979	2	-2	9.96	24	32	26161	2742	24.7	2.53	1.75	56	103	38.61
1383	98RDD1535	293748	5519353	2.5	-2	16.26	28	45	94378	2732	21.2	3.67	2.69	106	118	42.36
1384	98RDD1536	293323	5519785	1.6	-2	5.46	13	32	6729	1254	12.5	2.47	4.49	41	50	37.43
1385	98RDD1537	292769	5520446	0.5	-2	4.43	11	29	8378	1432	12.4	2.26	2.63	25	35	33.16
1386	98RDD1538	292252	5521021	0.5	-2	2.88	8	22	6105	862	11.5	2.74	1.64	20	21	31.15
1387	98RDD1539	292552	5521196	1.6	-2	2.64	10	48	7225	1215	11.6	3.52	2.69	38	82	72.72
1388	98RDD1541	292093	5521980	1.9	-2	14.02	18	39	67262	1132	18	2.76	4.4	82	88	47.59
1389	98RDD1542	291191	5522212	1.7	-2	5.7	12	31	9839	1108	16.1	2.08	3.07	30	48	47.74
1390	98RDD1543	290635	5521457	2.2	-2	9.85	27	32	40177	2223	16.3	5.12	2.3	117	109	41.79
1391	98RDD1544	290709	5522425	3	-2	18.89	27	31	77495	1841	16.8	5.59	2.35	140	119	39.97
1392	98RDD1545	290615	5523498	3.9	4	11.28	17	128	22604	2897	38.4	3.58	14.29	39	65	32.05
1393	98RDD1546	292370	5523196	1.6	-2	15.61	22	47	41312	1406	17	2.78	5.15	64	101	39.98
1394	98RDD1547	291840	5524239	1.3	-2	12.86	20	55	31663	1611	18.8	3.44	5.18	53	89	41.76
1395	98RDD1548	291813	5526522	2.2	-2	8.29	18	36	21470	2222	14.9	4.8	5.66	67	74	39.01
1397	98RDD1551	289551	5526950	1.6	-2	27.98	29	34	97262	2492	18.7	2.97	11.27	152	121	21.56
1398	98RDD1552	289983	5528208	1.8	-2	5.2	18	21	19885	1670	12	2.9	8.95	78	57	34.40
1399	98RDD1553	291175	5529995	1.6	-2	6.15	15	30	23894	2087	15.9	4.94	12.84	47	69	32.62
1400	98RDD1554	290876	5530413	2.4	-2	8.22	19	36	34703	2127	16.9	4.89	13.55	67	65	35.19
1401	98RDD1555	290218	5530607	1.7	-2	3.74	11	34	5348	1080	14.4	3.61	10.28	40	52	57.63
1402	98RDD1556	289513	5530897	1.2	-2	4.5	11	11	15833	824	10.3	1.78	3.24	55	71	44.34
1403	98RDD1557	289348	5531635	1.7	-2	2.49	8	14	10992	858	11.6	1.82	7.76	19	25	59.53
1404	98RDD1558	289503	5532101	1.6	-2	4.21	14	14	19860	1302	13.3	2.35	5.34	47	68	47.92
1405	98RDD1559	289912	5532205	2.8	-2	5.43	16	18	24400	1397	16.1	4.41	7.32	56	57	54.26
1406	98RDD1561	290743	5532377	2	-2	6.74	17	25	32158	1212	16.6	3.79	17.45	73	84	50.03
1407	98RDD1562	290982	5533644	1.6	-2	13.72	14	31	41187	1112	11.3	5.98	26.26	99	66	53.02
1408	98RDD1563	290726	5534286	1.3	-2	2.95	10	25	7606	961	12.5	2.07	7.13	19	52	52.96
1409	98RDD1564	291041	5535508	1.2	-2	9.05	18	34	24513	1684	11.5	4.31	11.28	78	67	48.24
1410	98RDD1565	288832	5534311	-0.5	-2	1.76	7	16	6550	859	7.4	1.71	4.24	23	24	31.92
1411	98RDD1566	289690	5535932	2.1	-2	16.89	29	41	63854	2134	25.6	3.89	13.4	94	122	31.14
1412	98RDD1567	290136	5537665	1.6	-2	4.71	20	33	24264	1672	14.2	3.44	1.77	83	73	44.65
1413	98RDD1568	290556	5539122	1.4	-2	2.32	10	20	16769	929	10	1.64	0.9	44	47	47.14

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1414	98RDD1569	289589	5539011	2.1	-2	14.69	25	31	40604	2141	22.7	32.93	6.16	155	193	41.67
1415	98RDD1571	288289	5538659	1.4	-2	3.73	8	27	5910	1008	12.6	2.11	1.16	39	48	48.70
1416	98RDD1572	288038	5538610	1.6	-2	3.21	5	32	5171	1180	9.8	1.95	1.52	33	43	45.27
1417	98RDD1573	288110	5537977	1.6	-2	28.4	19	29	48152	2291	17.3	3.38	9.22	95	81	25.80
1418	98RDD1574	286184	5537684	1.7	-2	4.11	10	25	12638	1314	8	2.04	1.03	96	63	30.18
1419	98RDD1575	285601	5537335	1.4	-2	6.78	17	88	5435	1417	22.7	3.54	1.14	41	77	63.53
1420	98RDD1576	285087	5537672	1	-2	9.76	17	34	80733	1772	14.1	2.34	0.78	225	61	17.56
1421	98RDD1577	284933	5537828	1.2	-2	15.49	18	63	87019	1744	20	2.3	0.85	194	83	31.87
1422	98RDD1578	285009	5538104	2.4	-2	8.68	15	71	16983	1209	29.1	2.5	1.13	74	111	57.50
1423	98RDD1579	284864	5538492	1.2	-2	21.8	12	41	94280	1602	12.8	2.03	0.68	124	84	8.81
1424	98RDD1581	285352	5539658	1.9	-2	16.09	24	39	83410	1578	17.3	2.66	1.35	220	80	44.22
1425	98RDD1582	285076	5539767	1.8	-2	5.67	7	82	10581	892	18.2	2.52	0.57	28	88	67.72
1426	98RDD1583	285219	5540133	-0.5	-2	6.07	8	22	13468	843	9.8	1.82	0.82	66	52	43.29
1427	98RDD1584	284992	5540325	1.9	-2	11.53	16	58	57940	1235	14.4	2.29	1	129	66	37.59
1428	98RDD1585	285527	5541725	1.5	-2	9.9	20	57	51014	2297	17.8	4.73	1.67	83	112	38.32
1429	98RDD1586	285947	5542490	1.5	-2	6.85	11	51	18976	1685	12.3	4.32	2.13	56	86	48.67
1430	98RDD1587	287224	5542478	-0.5	-2	6.88	9	37	18838	1240	11.5	2.45	1.16	50	48	37.95
1431	98RDD1588	286815	5540276	1.4	-2	9.42	13	40	25959	1040	15.2	2.41	1.66	57	62	42.84
1432	98RDD1589	287441	5539868	2	-2	5.36	11	29	16857	1279	11.3	3.71	1.55	54	46	46.90
1433	98RDD1591	286837	5538935	1.7	-2	7.34	10	49	17928	1129	12.5	2.52	1.36	49	59	42.56
1434	98RDD1592	286051	5539093	1.4	-2	4.1	8	21	12076	885	12.2	2.37	1.17	54	48	39.15
1435	98RDD1593	286066	5539360	1.5	-2	3.69	7	20	9728	1262	9.9	2.83	1.07	48	36	41.34
1436	98RDD1594	286174	5539790	1.3	-2	5.33	8	31	16920	852	14.7	2.8	1.36	40	38	48.67
1437	98RDD1595	286455	5539947	1.5	-2	4.39	17	32	15735	903	18.5	1.84	1.22	36	43	54.73
1438	98RDD1596	289327	5540058	1.3	-2	6.86	15	45	10165	972	17	2.35	2.78	27	85	56.06
1439	98RDD1597	289485	5540577	2.3	-2	10.7	21	60	42638	1569	21.9	4.56	2.18	84	80	44.75
1440	98RDD1598	289111	5540980	1.8	-2	11.37	24	42	53331	1505	18.6	3.37	1.62	99	89	38.25
1441	98RDD1599	289604	5541392	2.2	-2	12.8	25	49	56596	1529	19.7	3.97	1.76	107	95	40.49
1442	98RDD1601	290204	5541769	1.6	-2	8.04	20	30	17150	1703	16.4	4.32	1.57	49	65	41.64
1443	98RDD1602	290673	5541929	1.3	-2	10.64	27	51	27818	1816	17.3	4.26	1.77	69	81	45.29
1444	98RDD1603	292140	5541923	1.4	-2	4.09	13	32	8519	1308	13.7	3.43	1.27	23	51	56.14
1445	98RDD1604	292272	5541237	2.5	-2	27.88	40	65	127708	2699	24.8	4.75	4.41	165	132	39.40
1446	98RDD1605	291433	5541507	1.4	-2	8.14	25	41	26960	2013	20	2.45	1.91	70	67	45.59
1447	98RDD1606	290633	5541083	1.4	-2	7.74	22	40	35349	1506	17.5	3.19	1.45	99	75	41.28
1448	98RDD1607	290234	5540541	1.1	-2	2.55	11	21	12852	870	9.8	1.29	0.67	85	37	39.23
1449	98RDD1608	291108	5539947	1.7	-2	9.3	28	52	33595	2787	23.4	4.08	4.05	76	89	40.10
1450	98RDD1609	292093	5540111	0.5	-2	8.71	18	30	21936	2171	16	2.24	1.43	69	59	30.06
1451	98RDD1611	292328	5539622	1.4	-2	22.44	34	28	302250	875	10.4	1.46	1.26	332	39	40.12
1452	98RDD1612	292700	5539708	1.7	-2	9.28	28	47	6710	1206	25.9	2.77	1.46	56	145	68.19
1453	98RDD1613	292400	5539432	0.5	-2	10.36	22	74	4595	1140	25.3	4.38	2.21	49	105	67.84
1455	98RDD1615	292732	5537781	1.4	-2	10.38	30	68	28883	1782	19.1	4.71	3.92	85	92	44.98
1456	98RDD1616	293270	5536775	2.9	-2	23.28	39	55	119138	1919	19.9	6.95	8.34	196	134	41.98
1458	98RDD1618	294314	5539258	1.2	-2	3.61	23	34	13505	1824	13.8	2.64	1.47	113	67	46.95
1459	98RDD1619	293792	5539284	1.3	-2	9.64	25	43	17628	1712	20.8	2.42	2.38	79	78	39.77
1460	98RDD1621	293568	5540731	1.9	-2	14.06	32	44	39931	2025	23.2	3.1	2.01	117	118	36.22
1461	98RDD1622	293711	5541903	2.9	-2	21.94	38	87	60110	2283	23.6	4.22	3.97	146	87	41.35
1463	98RDD1624	297398	5541742	1.3	-2	20.28	39	56	110092	2097	20.4	5.09	7.33	170	145	37.05
1464	98RDD1625	295635	5540494	3.1	-2	3.58	12	25	9333	1085	16.2	2.43	1.26	30	37	41.10
1466	98RDD1627	297039	5539071	1.4	-2	6.42	17	47	7315	1182	15	2.4	1.01	35	50	44.94
1467	98RDD1628	297860	5538091	1.3	-2	2.35	7	17	8235	843	7.9	3.44	0.9	16	17	51.48
1468	98RDD1629	296789	5536824	1.6	-2	23.17	24	28	104213	1712	11.9	2.23	2.38	149	101	30.82
1469	98RDD1631	295639	5537492	1.2	-2	9.69	21	28	38377	1552	14.5	2.58	1.92	82	82	32.77
1470	98RDD1632	295881	5536982	1.7	-2	13.84	22	34	45596	1369	12.8	3.52	2.09	115	104	42.71
1471	98RDD1633	295345	5536413	0.5	-2	6.2	14	18	21359	852	10.3	1.75	2.4	72	43	32.47
1472	98RDD1634	295137	5535696	2.2	3	42.13	26	36	124302	1331	15	3.57	3.07	166	105	46.28
1473	98RDD1635	294297	5535544	1.1	-2	7.61	22	44	34493	1502	12	5.36	4.12	239	89	53.98
1474	98RDD1636	294067	5535172	1.2	-2	3.62	9	31	7389	1197	9.9	4.87	1.93	50	52	40.21
1475	98RDD1637	293892	5534724	1.7	-2	5.18	11	24	4691	880	9.3	3.38	2.1	40	88	67.91
1477	98RDD1639	294714	5531475	1	-2	3.02	9	14	12382	730	7.7	2.57	3.88	41	37	31.34
1478	98RDD1641	295583	5529327	2.4	-2	8.92	26	34	82896	1514	15.8	3.76	4.17	223	114	51.53
1479	98RDD1642	295596	5525726	1.4	-2	7.65	15	26	17041	1779	16.7	2.78	1.72	44	58	39.65
1480	98RDD1643	295777	5521842	1.8	-2	3.44	11	12	15530	859	12.1	2.5	0.47	33	43	59.18
1481	98RDD1644	297147	5519661	2.8	-2	21.07	27	42	25328	2266	29.1	3.92	2.46	78	131	43.59
1483	98RDD1646	297622	5513207	1.3	-2	12.53	30	56	30068	3575	17.7	2.74	0.82	99	55	29.86
1484	98RDD1647	299198	5512185	1.5	-2	4.82	11	71	9256	886	10.8	2.36	0.87	54	63	51.92
1485	98RDD1648	301326	5508985	2.4	-2	4.31	11	14	6200	1323	14.5	3.23	0.39	18	50	51.68

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1486	98RDD1649	306507	5507668	5.5	-2	17.1	26	66	22810	3246	29.9	9.51	1.2	60	95	31.79
1487	98RDD1651	303847	5510741	3.1	-2	6.79	29	34	20836	2635	22.9	3.85	1.12	58	89	38.23
1488	98RDD1652	301495	5510305	2.3	-2	3.44	13	21	5748	1442	12.1	3.84	0.7	31	45	40.47
1489	98RDD1653	299934	5511992	1.4	-2	5.76	14	70	2910	787	14.9	1.7	1.96	21	30	45.02
1490	98RDD1654	298909	5512848	1.5	-2	7.78	23	54	12914	1802	16.1	2.24	1.38	50	60	38.65
1491	98RDD1655	298110	5513098	1.4	-2	33.09	18	19	40201	1933	17.5	3.7	1.32	90	70	10.75
1492	98RDD1656	297622	5513841	2.1	-2	5.92	17	42	4356	1251	12	2.06	0.89	42	63	58.31
1493	98RDD1657	298547	5513875	2.6	-2	13.32	30	48	37458	2150	18.1	2.89	1.38	104	91	40.97
1495	98RDD1659	298977	5518500	1.4	-2	4.96	10	28	4780	927	14.2	3.4	0.77	17	45	43.93
1496	98RDD1661	298939	5518957	1.5	-2	27.16	23	38	26441	2209	20.8	3.53	2	92	132	40.16
1497	98RDD1662	296984	5518916	1.7	-2	12.91	27	32	21218	2344	22.8	2.06	1.56	56	86	38.92
1498	98RDD1663	296877	5519958	1.9	-2	14.27	32	48	41622	2874	32	2.78	3.21	101	146	35.02
1499	98RDD1664	297461	5520311	1.7	-2	4.15	13	50	22025	1001	14.3	2.51	0.74	106	87	80.00
1500	98RDD1665	297802	5520838	1.3	-2	7.31	20	61	15598	1650	24.5	1.75	1.46	38	76	34.51
1503	98RDD1668	295637	5520537	2.3	-2	15.86	17	28	17478	2091	13.9	5.82	3.1	55	102	48.48
1504	98RDD1669	294802	5519961	1.2	-2	5.68	14	23	10395	1426	17.6	4.33	1.24	29	43	40.81
1505	98RDD1671	293766	5521818	4.5	-2	12.22	28	41	68092	2181	20.1	5.12	3.55	106	113	40.66
1506	98RDD1672	293115	5521757	2.1	-2	12.35	21	70	34378	1450	18.9	3.55	6.54	61	98	52.76
1507	98RDD1673	292922	5522346	2	-2	2.78	10	24	6418	848	9.5	2.97	0.84	26	57	70.41
1508	98RDD1674	293768	5522614	3.3	-2	12.6	31	88	49182	3065	21.8	4.36	7.55	148	104	59.95
1509	98RDD1675	294464	5523196	3.4	-2	27.46	50	57	150518	3434	26	5.14	4.56	263	144	42.43
1510	98RDD1676	293891	5523526	0.5	-2	5.09	11	87	4145	1231	13.6	3.67	10.98	15	56	41.62
1511	98RDD1677	292799	5524113	1.8	-2	8.25	17	29	21300	983	19	2.63	2.78	46	69	49.55
1512	98RDD1678	293291	5526062	1.6	-2	9.49	17	35	42238	1655	15.8	3.16	2.79	79	79	33.93
1513	98RDD1679	294007	5525687	1.3	-2	9.39	15	48	32924	1893	17.6	3.07	5.98	74	70	35.91
1514	98RDD1681	295252	5526522	3.4	-2	12.71	31	50	56279	3672	26.4	4.98	3.86	103	129	38.45
1515	98RDD1682	297044	5526834	1.7	-2	7.8	18	39	15846	1595	18.2	2.79	1.28	49	72	45.09
1516	98RDD1683	297681	5527631	1.3	-2	7.08	12	37	11115	882	17.9	2.15	1.26	44	59	51.62
1517	98RDD1684	296868	5528349	1.4	-2	8.87	19	38	32258	2067	18	3.1	3.17	80	82	41.57
1518	98RDD1685	295973	5527790	2.1	-2	21.5	27	46	70598	2896	22.3	4.77	3.45	133	133	37.39
1519	98RDD1686	294849	5527748	3.3	-2	11.34	31	46	61900	2519	21.8	6.4	6.45	114	112	46.43
1520	98RDD1687	294228	5527639	2.6	-2	16.25	30	71	55661	3457	23.7	5.2	8.3	133	114	46.51
1521	98RDD1688	292385	5527915	1.8	-2	14.95	23	38	46262	2154	18.5	4.2	8.2	85	93	34.81
1522	98RDD1689	291941	5527177	1.1	-2	7.59	17	33	23178	1812	15.9	3.39	6.26	51	65	33.86
1523	98RDD1691	291809	5527914	1.5	-2	4.76	11	19	9649	1030	14.6	2.66	2.13	28	41	33.97
1524	98RDD1692	291539	5528622	2.1	-2	10.47	16	50	15035	1285	18.4	5.69	3.36	48	60	53.86
1525	98RDD1693	292267	5528805	1.6	-2	5.68	9	23	7014	764	12.9	3.17	2.57	24	57	55.65
1526	98RDD1694	292672	5529285	1	-2	6.43	16	39	11784	1596	10.4	4.47	12.29	82	58	43.32
1527	98RDD1695	294031	5529514	2.5	-2	34.36	36	61	186612	2058	26.6	8.43	15.1	209	157	39.78
1528	98RDD1696	294467	5530808	3.1	-2	39.07	37	59	226238	1768	30.2	7.02	15.41	222	154	36.89
1530	98RDD1698	291928	5531061	0.5	-2	2.23	9	17	7045	762	8.7	1.95	2.67	20	32	35.90
1531	98RDD1699	293134	5531795	1.7	-2	10.92	21	48	79118	1128	14.6	6.59	48.24	85	100	49.59
1532	98RDD1701	293625	5532602	1.2	-2	3.14	9	19	8215	892	10	3.67	10.4	26	40	38.54
1533	98RDD1702	294752	5533790	2.8	-2	11.86	29	43	94012	2425	19.6	5.43	6.03	184	129	52.98
1534	98RDD1703	295186	5532977	2.7	-2	9.92	30	41	80102	2905	19.3	5.23	5.61	181	113	48.09
1535	98RDD1704	295887	5532279	1.5	-2	7.24	12	45	23207	1048	12.8	2.7	10.12	32	100	57.77
1536	98RDD1705	296032	5531950	2.1	-2	13.33	26	46	34005	1818	19.8	3.81	9.61	114	138	43.97
1537	98RDD1706	296124	5531151	3.2	-2	26.21	31	65	127814	2260	24.7	6.93	9.54	128	127	38.81
1538	98RDD1707	296608	5531989	2.3	-2	4.09	15	18	10142	915	13.4	3.07	3.19	56	169	72.70
1539	98RDD1708	297556	5532044	2.1	-2	14.56	28	55	52976	2632	22.8	3.39	3.18	98	139	36.19
1540	98RDD1709	297265	5532908	2.1	-2	9.35	15	34	51671	1102	16.4	3.54	2.63	73	92	47.37
1541	98RDD1711	298462	5532754	2.5	-2	6.82	17	20	28855	1927	14.6	3.3	4.25	78	80	42.20
1542	98RDD1712	296874	5533567	1.2	-2	2.92	10	17	12723	1232	10.1	2.63	1.1	31	44	33.89
1543	98RDD1713	297306	5533511	1.7	-2	2.1	10	63	15471	1736	10	4.89	0.87	81	67	62.57
1544	98RDD1714	297170	5534023	0.5	-2	2.19	10	33	7418	982	9.7	2.02	0.66	31	32	39.69
1545	98RDD1715	296307	5534252	1.9	-2	19.85	32	42	85300	2376	22.7	3.2	3.3	123	153	42.95
1546	98RDD1716	294991	5534680	1.6	-2	12.18	30	53	296874	1009	16.8	1.98	3.41	196	81	40.62
1547	98RDD1717	295755	5534916	1.2	-2	4.11	11	53	8991	1109	10.2	2.4	2.91	26	85	69.61
1548	98RDD1718	296369	5535282	1.8	-2	12.63	24	40	45298	1994	17.1	3.48	2.98	117	98	46.79
1549	98RDD1719	299140	5535480	1.6	-2	10.08	9	46	22471	1292	39.4	2.07	0.3	38	79	50.59
1550	98RDD1721	299623	5535753	1.7	-2	6.25	12	31	12849	1671	29.8	4.1	0.34	33	45	51.66
1551	98RDD1722	300416	5536917	3.4	3	18.14	14	88	183349	1584	27.2	1.91	0.51	109	57	44.69
1552	98RDD1723	300306	5536029	2.2	4	26.94	22	119	67286	1237	49.4	2.17	0.92	90	117	61.85
1563	98RDD1724	299406	5537993	1	-2	6.49	20	32	16741	2173	16	2.34	1.18	63	69	38.11
1554	98RDD1725	298575	5537304	1.4	-2	9.43	35	68	19207	4558	27.1	6.54	0.74	158	95	38.19
1556	98RDD1727	299255	5539804	0.5	-2	5.68	18	50	16509	1678	17.1	2.62	1.01	46	56	38.17

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1557	98RDD1728	299535	5541983	1.4	-2	7.77	17	39	14447	1740	14	2.85	1.55	61	66	41.28
1558	98RDD1729	300509	5541804	1.8	-2	3.22	11	41	8745	1092	13.9	2.87	0.74	51	81	59.77
1559	98RDD1731	300040	5541125	1.1	-2	2.91	10	31	13366	1700	10.1	2.58	0.78	57	61	44.73
1560	98RDD1732	300092	5540013	2.6	-2	24.69	21	71	38676	1995	17.3	12.69	1.02	134	99	44.74
1561	98RDD1733	301032	5539352	1.7	5	10.26	13	85	15216	1892	22.5	3.22	0.78	54	60	38.27
1562	98RDD1734	300680	5538416	1.9	2	11.82	11	94	16700	1451	31.2	1.93	0.62	50	71	44.19
1563	98RDD1735	301626	5538646	1.5	4	10.43	8	94	8987	1149	20.1	2.66	0.32	42	118	69.70
1564	98RDD1736	302175	5538982	1.9	4	20.38	18	99	49022	1576	40	5.34	0.53	73	97	40.61
1565	98RDD1737	302026	5537898	1.9	-2	7.45	13	50	18989	1310	30.3	2.98	0.54	73	79	43.12
1566	98RDD1738	302157	5536995	1.5	-2	8.72	13	56	21294	1548	32	2.91	0.59	84	95	44.47
1567	98RDD1739	302130	5533002	2.3	-2	33.58	18	50	56589	1358	18.2	7.02	0.78	168	80	51.26
1568	98RDD1741	300880	5533990	1.8	-2	12.23	28	21	40667	2775	19.8	2.84	0.8	205	69	28.06
1569	98RDD1742	299742	5533995	1.8	-2	21.26	19	71	33320	4170	35.9	3.26	1.3	53	94	29.64
1570	98RDD1743	299549	5533797	0.5	-2	10.11	9	33	17299	1222	23.8	1.37	1.14	23	56	30.51
1571	98RDD1744	299615	5533077	1	2	19.42	21	97	26891	3081	27.8	2.87	1.27	80	95	37.73
1575	98RDD1748	298417	5530870	1.6	-2	10.38	17	62	17121	1561	16.8	3.31	1.5	100	63	45.16
1576	98RDD1749	296463	5529404	1.4	-2	6.47	12	20	33891	1399	14.2	2.47	2.06	52	81	32.43
1577	98RDD1751	297872	5529146	2.3	-2	14.64	24	48	44025	2442	23.9	3.46	2.8	99	126	32.33
1578	98RDD1752	297926	5528480	2.4	-2	13.87	23	42	66502	2387	22.2	3.38	2.82	136	108	37.09
1579	98RDD1753	298368	5527536	1.4	-2	7.31	15	32	23304	1685	19.5	2.51	1.69	55	63	35.58
1580	98RDD1754	298218	5526434	1	-2	3.37	4	22	3953	797	11.5	1.8	0.36	10	33	50.08
1581	98RDD1755	298939	5526029	2.9	-2	12.24	21	75	24595	1506	21.8	4.05	1.09	67	119	48.78
1582	98RDD1756	299338	5526626	1.4	-2	2.93	4	19	3116	731	11.2	2.41	0.36	10	45	52.33
1583	98RDD1757	299549	5525619	4	3	7.88	18	66	18392	2120	19.4	4.98	1.03	51	99	43.93
1584	98RDD1758	299691	5523338	3.5	-2	5.74	10	48	25797	1308	16.6	1.7	0.47	103	113	53.02
1586	98RDD1761	299015	5521656	1.9	-2	6.99	19	53	7421	2259	20.5	4.22	1.7	46	52	52.72
1587	98RDD1762	299496	5518648	0.5	-2	3.92	6	56	2346	790	10.8	1.41	1.69	12	44	49.67
1588	98RDD1763	299670	5517785	2.9	-2	11.62	15	40	22896	1242	28.9	3.05	0.74	69	72	47.71
1589	98RDD1764	299155	5513530	7.8	3	15.64	30	103	30521	2911	39	4.05	2.43	76	104	53.79
1590	98RDD1765	300623	5512956	1.7	-2	2.19	6	13	6493	571	8.7	4.12	0.26	24	20	34.12
1591	98RDD1766	303366	5512112	9.1	-2	17.44	40	63	43888	3559	33.5	4.01	1.99	105	134	45.67
1592	98RDD1767	307168	5509108	3.6	3	14.24	25	57	21502	2665	28.4	3.64	1.2	67	113	43.13
1593	98RDD1768	307754	5508266	1.7	-2	5.08	13	24	7344	963	13.5	2.89	0.27	42	130	78.26
1594	98RDD1769	307421	5511921	2.5	-2	12	26	42	21214	2908	24.4	2.35	0.8	69	108	38.75
1595	98RDD1771	302414	5511879	9.4	-2	21.76	26	97	59238	3201	30.4	3.88	2.23	109	94	52.56
1596	98RDD1772	300103	5513990	3.1	6	14.56	27	43	36839	2578	22	2.41	1.08	98	87	28.40
1597	98RDD1773	299351	5514567	3	-2	9.42	30	61	35629	2688	22.7	2.76	1.22	89	95	42.99
1598	98RDD1774	300973	5514566	2	-2	9.03	17	36	11356	989	20	2.07	0.5	37	53	55.82
1599	98RDD1775	301671	5516033	1.7	-2	4.15	14	25	10060	779	13.6	2.36	0.33	34	34	38.51
1601	98RDD1777	300477	5518322	4	-2	5.91	20	110	45161	3044	19.8	2.02	0.93	164	65	36.92
1602	98RDD1778	301312	5518619	4.3	-2	4.3	12	27	3782	933	12.9	1.81	0.66	27	60	65.85
1603	98RDD1779	302287	5518227	1.1	-2	5.67	16	46	6898	1953	17.1	1.85	0.62	25	58	42.29
1605	98RDD1782	301729	5519372	2.3	-2	5.1	13	25	5332	1263	16.2	3.26	0.52	26	45	61.06
1606	98RDD1783	301043	5519460	2	-2	7.34	16	49	7501	1386	18	2.7	0.67	62	110	58.19
1607	98RDD1784	300703	5519427	2.6	-2	6.46	18	36	10761	1322	17.2	2.57	0.88	60	65	36.41
1608	98RDD1785	300435	5519248	14	-2	23.71	52	89	174768	1839	27.1	3.67	2.12	723	61	51.48
1609	98RDD1786	300247	5518988	10	-2	11.68	26	53	173031	976	16.3	2.08	2	180	58	51.38
1610	98RDD1787	300122	5518733	1.4	-2	6.36	22	72	4757	1713	17.2	3.78	1.23	30	79	55.50
1611	98RDD1788	300050	5519667	2.2	-2	25.83	28	45	38343	1927	24	2.57	2.41	90	113	38.81
1612	98RDD1789	300869	5520459	3.2	-2	22.9	26	48	42393	1535	17.3	5.66	1.68	137	107	43.80
1613	98RDD1791	302139	5520236	1.1	-2	5.54	11	29	8093	1541	16	2.72	0.7	30	45	35.61
1614	98RDD1792	302163	5521280	2.2	-2	9.16	19	36	19193	1258	19.1	3.12	1.45	57	82	36.29
1615	98RDD1793	302903	5521127	2.1	-2	5.24	16	24	13243	1005	14.9	1.81	0.73	46	55	33.91
1616	98RDD1794	303525	5521219	6.8	-2	7.84	21	50	33299	1421	19.5	1.67	2.03	77	75	48.28
1617	98RDD1795	303709	5521904	11	-2	6.84	31	41	12521	1653	15.7	1.95	2.17	49	51	44.60
1618	98RDD1796	302782	5521859	3.5	-2	14.15	26	46	46024	1788	23	2.27	1.39	90	112	40.96
1619	98RDD1797	302589	5522586	3.8	-2	22.39	28	78	37686	2154	28.7	4.12	2.72	80	144	40.56
1620	98RDD1798	301958	5522648	3.3	-2	10.86	13	63	18124	1588	17.6	3.3	1.11	63	167	66.18
1621	98RDD1799	301027	5522140	3	-2	27.69	34	80	39962	2946	32.1	5.83	2.71	89	162	39.31
1622	98RDD1801	300091	5521654	1.4	-2	15.42	29	82	21162	2644	32.2	2.57	1.52	47	106	39.52
1623	98RDD1802	299581	5521356	1.6	-2	8.23	22	45	9997	2433	22.3	1.78	1.1	30	71	37.35
1624	98RDD1803	299239	5521302	1	-2	8.77	24	32	10960	3083	20	1.83	0.74	29	61	31.66
1625	98RDD1804	300540	5522583	1.8	-2	6.73	20	57	15291	1405	20.5	5.85	1.3	41	99	34.55
1626	98RDD1805	301360	5523145	1.4	-2	4.63	10	40	5498	668	12.5	2.01	0.79	16	108	61.60
1627	98RDD1806	301915	5523474	2.5	-2	3.89	18	85	7771	1185	15.9	3.56	1.4	25	47	35.41
1628	98RDD1807	302039	5524056	1.7	-2	4.64	10	38	4779	833	10.4	1.83	1.11	27	108	58.24

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
1629	98RDD1808	301210	5523733	3.3	-2	12.31	29	77	35889	2178	22.2	8.68	1.62	78	152	43.46
1630	98RDD1809	300881	5524118	1.1	-2	3.19	10	76	2163	777	15.7	1.41	1.25	9	41	38.54
1631	98RDD1811	301231	5524598	5	-2	14.31	25	94	55109	2505	21.3	10.15	2.16	115	165	45.35
1632	98RDD1812	302152	5525024	2.9	-2	5.13	4	40	10168	794	11.2	4.25	0.86	21	60	53.59
1634	98RDD1814	301405	5526184	1.2	-2	4.46	8	29	8374	993	14.3	3.27	0.41	22	46	44.93
1636	98RDD1816	300542	5526505	2.3	-2	16.4	14	49	20553	1573	21.1	14.87	1.67	57	110	43.15
1637	98RDD1817	300146	5527054	1.4	-2	9.83	11	33	17818	1272	19.5	7.14	1.3	49	66	37.71
1638	98RDD1818	299697	5527372	2.2	-2	7.99	12	38	13642	1436	20.4	8.2	1.54	46	68	40.09
1639	98RDD1819	299504	5527661	1.8	-2	14.29	18	41	21139	2263	21.9	7.89	2.28	70	91	36.89
1640	98RDD1821	299207	5528129	1.3	-2	7.43	13	32	15859	1530	18.1	2.97	1.44	56	52	37.08
1641	98RDD1822	300664	5527944	3.1	-2	15.52	22	74	53675	1111	28.1	2.57	1.57	77	119	45.44
1642	98RDD1823	301947	5527596	1	-2	2.55	6	34	7906	867	10.3	2.62	0.39	27	34	48.77
1643	98RDD1824	300489	5528919	3.3	-2	13.88	21	73	35760	1303	26.4	3.28	1.45	53	95	44.20
1644	98RDD1825	300075	5528784	3.1	-2	14.72	21	81	51242	1397	31.5	3.84	2.22	62	113	54.47
1645	98RDD1826	299598	5529531	1.5	2	4.76	9	41	4947	1177	17.8	3.15	1.94	33	55	56.11
1646	98RDD1827	299461	5529864	2.5	-2	16.62	25	69	115337	2007	23.2	3.39	1.35	142	146	41.41
1647	98RDD1828	299828	5530935	2.7	4	52.71	23	73	187670	1871	31.6	3.07	1.55	158	176	39.06
1648	98RDD1829	301319	5531004	1.7	-2	5.9	12	48	24728	1557	16.3	2.92	0.82	58	76	38.42
1649	98RDD1831	303515	5531840	1.4	-2	16.72	13	44	37207	1797	23.2	1.61	0.97	68	90	35.90
1650	98RDD1832	303515	5532287	1.4	-2	4.36	22	38	13741	949	17.6	2.41	0.87	62	108	68.30
1651	98RDD1833	303232	5533259	0.5	-2	5.88	8	11	14226	871	15.2	1.36	0.22	17	44	41.85
1653	98RDD1835	303582	5537393	1.5	3	19.18	24	84	35287	1968	32.1	2.77	0.7	80	105	37.77
1654	98RDD1836	303986	5539116	1.6	-2	8.46	11	96	11768	1106	26.5	2.62	0.42	35	47	40.59
1657	98RDD1839	304609	5541836	-0.5	-2	4.4	15	38	7206	1669	18.9	1.76	0.77	21	37	29.62
1658	98RDD1841	305654	5541128	1.1	-2	5.43	14	50	7412	1116	26.3	2.17	1.04	27	43	33.81
1659	98RDD1842	305420	5540656	1.5	4	18.43	30	99	31480	1961	28.9	3.5	1.35	85	107	41.91
1660	98RDD1843	306560	5539647	1.7	-2	10.63	34	75	21859	2890	38.9	2.55	1.23	46	85	37.90
1661	98RDD1844	306687	5540613	3.7	6	31.15	36	244	30818	2787	73.7	3.52	3.56	66	130	49.02
1662	98RDD1845	307556	5540272	2.4	4	24.65	37	150	26934	3561	54.9	3.93	3.55	81	131	47.72
1663	98RDD1846	308516	5540743	1.8	-2	22.8	36	80	56661	1928	32.5	3.49	1.44	100	120	35.43
1664	98RDD1847	309019	5540042	0.5	-2	11.83	27	64	28785	1906	25.4	2.96	1.14	67	80	32.99
1665	98RDD1848	307805	5538914	3.8	5	18.7	32	166	30619	2628	64.4	3.96	2.78	46	122	69.18
1666	98RDD1849	308106	5537472	2	-2	14.33	35	73	24666	1775	30.7	3.19	1.19	62	88	41.12
1668	98RDD1852	307723	5535888	2.1	-2	13.88	40	54	19958	1568	35	2.78	0.77	53	86	45.59
1669	98RDD1853	307270	5535711	2.5	-2	16.94	26	94	19326	1244	32.1	2.25	0.83	38	73	44.44
1670	98RDD1854	305597	5535068	1.8	-2	17.06	21	69	29404	1956	21.3	2.81	0.64	95	118	36.94
1673	98RDD1857	308060	5534974	1.9	-2	12.55	23	38	16471	3205	23	2.69	0.61	45	78	31.54
1674	98RDD1858	307318	5534431	8.1	-2	10.09	27	67	9109	1636	34.5	3.83	0.68	32	71	42.83
1675	98RDD1859	307082	5533864	7	-2	11.36	44	75	14448	2514	40.9	3.72	0.6	42	91	41.99
1676	98RDD1861	306771	5533869	0.5	-2	4.33	9	20	9226	1496	10.6	3.48	0.46	22	34	28.65
1677	98RDD1862	306860	5532213	1.7	-2	19	35	47	46167	2469	28.4	2.24	0.92	59	95	38.97
1678	98RDD1863	307422	5532545	3.9	-2	22.48	94	87	95091	1960	60.7	3.34	0.77	97	96	43.90
1679	98RDD1864	307181	5531720	2.1	-2	4.21	32	41	6424	1272	27.9	3.3	0.4	20	36	43.62
1680	98RDD1865	305243	5531503	1.9	-2	20.26	18	42	38572	2393	24.8	1.98	1.16	57	100	37.25
1681	98RDD1866	304531	5531519	1.4	-2	38.6	15	31	39538	4383	19.6	3.81	0.83	71	122	29.87
1682	98RDD1867	304222	5531123	1.1	-2	4.62	12	25	9867	1194	11.8	4.04	0.83	22	42	43.06
1683	98RDD1868	303785	5530162	3.5	-2	6.14	25	28	12669	1132	17.8	2.31	0.71	93	30	67.49
1684	98RDD1869	302989	5529920	3.4	-2	9.46	29	37	39956	3311	17.4	2.97	0.64	125	75	32.53
1685	98RDD1871	302890	5528945	1.9	-2	6.23	25	38	18557	2136	18.2	1.99	0.51	44	59	46.80
1686	98RDD1872	302549	5528827	1.6	-2	8.6	20	45	23144	2612	17.3	2.25	0.5	66	79	38.48
1687	98RDD1873	303380	5527915	4.7	-2	10.98	25	66	22699	1501	21.1	3.21	0.76	61	105	60.20
1688	98RDD1874	303263	5527302	4	-2	3.79	13	31	12382	1000	16.2	1.98	0.61	38	79	70.44
1689	98RDD1875	303633	5526754	4.9	-2	10.69	24	31	40549	1303	17.9	2.86	0.4	96	105	63.10
1690	98RDD1876	303278	5526654	13	-2	16.67	14	20	234320	517	11.8	0.6	0.57	28	67	47.63
1691	98RDD1877	302577	5526777	3.2	-2	7.68	45	43	31752	1666	27	3.01	0.63	123	71	47.86
1692	98RDD1878	303055	5525667	8.4	-2	27.51	67	112	104390	2595	43.8	3.67	2.63	105	210	51.40
1693	98RDD1879	302900	5525118	2.2	-2	8.88	17	102	7236	1213	22.1	2.33	2.15	19	86	40.01
1694	98RDD1881	303144	5524725	1.6	-2	8.19	13	68	12400	2943	17.3	3.32	1.78	23	121	49.75
1695	98RDD1882	302793	5524341	0.5	-2	3.12	4	48	3463	852	12	1.56	0.69	7	47	35.49
1696	98RDD1883	303345	5523471	3.4	-2	20.47	30	39	170670	1467	23.8	1.4	1.07	428	125	60.23
1697	98RDD1884	303419	5523256	2	-2	6.6	13	32	13234	1224	17	2.84	0.78	74	47	55.13
1698	98RDD1885	303779	5522917	2.8	-2	13.42	29	79	43954	2618	26.6	3.69	2.15	98	125	42.95
1699	98RDD1886	305171	5521388	3.3	-2	9.2	16	57	16742	1837	16.3	2.65	0.8	79	73	52.05
1700	98RDD1887	305611	5520260	1.9	-2	4.15	13	19	12525	1650	12.3	3.07	0.53	39	44	42.18
1701	98RDD1888	304595	5517308	2.4	-2	7.09	18	42	20016	2896	21.7	1.86	0.52	51	84	62.40
1702	98RDD1889	303942	5515899	2.3	-2	7.32	13	35	16108	1901	17.5	2.04	0.48	54	70	44.97

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
1703	98RDD1891	303556	5515624	3.2	-2	6.45	7	20	18941	1069	11.2	1.62	0.26	44	73	52.07
1704	98RDD1892	303382	5514856	2.4	-2	3.67	14	39	18986	2251	11.9	1.77	0.55	89	64	52.49
1705	98RDD1893	302414	5514897	3	-2	6.08	10	22	11982	1473	14.1	4.16	0.38	26	67	48.92
1706	98RDD1894	304796	5512810	3	-2	7.52	20	31	26095	2527	18.2	2.07	0.78	74	90	34.44
1707	98RDD1895	307301	5509656	4.3	-2	27.77	28	75	54262	4253	30.2	2.81	1.27	122	176	33.42
1708	98RDD1896	307816	5508926	3.2	-2	5.74	14	30	24126	1666	14.4	2.49	0.43	61	122	72.30
1709	98RDD1897	307869	5509313	5.6	-2	8.38	17	64	18498	1716	23.2	1.34	1.61	74	51	53.73
1711	98RDD1899	306111	5514570	2	-2	12.68	17	38	35598	1882	15.7	4.18	0.64	113	77	41.47
1712	98RDD1901	306894	5517227	3.1	-2	6.57	18	38	14754	1906	28	5.72	0.73	47	94	47.38
1713	98RDD1902	307534	5518321	1.9	-2	6.14	15	33	12791	1299	20	3.56	0.44	48	54	37.45
1715	98RDD1904	305907	5523185	3.5	-2	21.19	24	59	42954	3573	23.9	2.93	2.11	86	133	38.30
1716	98RDD1905	304260	5523456	2.5	-2	11.68	18	73	19916	2020	24.2	2.66	1.34	50	66	54.87
1717	98RDD1906	303849	5523857	2	-2	8.77	25	69	27842	1910	25.8	1.42	1.33	67	64	40.07
1718	98RDD1907	303705	5525331	0.5	-2	4.72	13	24	6386	1971	13.7	1.98	0.37	19	39	22.64
1719	98RDD1908	301916	5525671	2.1	-2	7.13	6	59	6948	1030	12.2	0.98	0.7	17	76	54.84
1720	98RDD1909	301425	5525661	2.6	-2	4.58	5	40	8557	715	9.7	0.68	0.28	16	192	75.58
1721	98RDD1911	300361	5525579	5	-2	29.56	21	84	73441	2387	18.5	12.04	1.94	128	131	47.33
1722	98RDD1912	300691	5526693	0.5	-2	4.26	17	49	12836	3112	16.8	2.94	0.62	37	76	25.50
1723	98RDD1913	304864	5526044	6.6	-2	9.34	36	112	78308	3628	21.5	3.05	1.26	122	108	32.18
1724	98RDD1914	305488	5524282	3.1	-2	11.59	35	69	36353	2996	29.9	2.45	1.38	86	81	39.14
1725	98RDD1915	306518	5522846	4.2	-2	36.34	29	75	53229	2606	29.7	3.29	2.42	111	134	45.61
1726	98RDD1916	307231	5521746	2.8	-2	15.31	32	60	50509	2668	25.5	1.61	1.12	124	99	40.91
1727	98RDD1917	307690	5520342	5.5	-2	4.76	13	50	8923	1575	15.5	0.84	1.16	41	59	51.36
1728	98RDD1918	307836	5519909	2.8	-2	6.34	25	44	46859	1608	18.1	1.16	0.64	151	44	45.36
1729	98RDD1919	308585	5519322	3.2	-2	5.94	22	46	13189	1685	27.6	2.31	0.57	81	62	43.14
1730	98RDD1921	308220	5518618	3.2	-2	7.87	24	55	24597	1690	31.5	2.28	0.55	85	75	41.95
1731	98RDD1922	307819	5517391	1.9	-2	29.61	18	138	55975	1635	46.3	2.71	0.5	168	56	61.27
1732	98RDD1923	307307	5516211	1.4	-2	13.36	19	161	16048	1802	36.3	1.36	0.68	71	63	49.48
1733	98RDD1924	306777	5514990	2.1	-2	8.93	24	47	24005	2658	18.4	1.5	0.57	89	65	40.65
1734	98RDD1925	306490	5513806	2.3	-2	10.96	27	41	31224	2245	19.5	2.41	0.61	91	86	40.51
1735	98RDD1926	307336	5510922	3.3	-2	22.99	30	51	54463	2690	23.3	1.61	0.76	125	119	38.80
1736	98RDD1927	307754	5508489	4.3	-2	4.03	20	155	18484	926	28.9	0.47	2.55	115	35	52.42
1737	98RDD1928	308354	5512546	2.2	-2	10.84	24	33	33277	2497	24.6	1.3	0.65	67	89	43.75
1738	98RDD1929	307485	5513383	2.3	-2	6.76	14	20	13221	1172	17.9	1.2	0.26	49	70	50.70
1739	98RDD1931	308743	5515286	5.6	-2	15.2	39	80	52858	3904	35.7	3.96	1.64	108	142	48.85
1740	98RDD1932	309970	5517624	5	-2	12.71	41	83	40497	4055	39.5	4.03	1.69	101	136	47.42
1741	98RDD1933	309547	5521109	5.8	-2	10.12	39	37	55886	2061	21	2.84	1.43	142	93	55.10
1742	98RDD1934	309074	5522386	12	-2	11.99	33	55	85515	1419	22.2	2.35	2.94	129	95	65.73
1743	98RDD1935	308662	5522764	2.6	-2	9.79	31	41	36479	2148	26.6	2.15	1.14	70	83	38.13
1744	98RDD1936	309397	5523498	3.3	-2	14.34	30	46	44305	3109	27.3	2.52	1.52	89	108	33.93
1745	98RDD1937	310145	5524341	4.7	-2	10.23	31	66	35708	2251	20.9	4.05	2.27	95	122	44.36
1746	98RDD1938	309945	5525790	8.7	-2	16.34	48	86	128524	2242	24.6	3.47	3.43	156	180	45.32
1747	98RDD1939	308611	5525955	2.4	-2	4.44	10	31	7438	1113	13.7	2.81	0.83	41	41	44.97
1748	98RDD1941	308280	5525747	2.8	-2	18.34	29	46	35573	3377	23.5	2.86	1.69	89	95	38.36
1749	98RDD1942	307789	5526356	17	-2	14.2	26	81	22063	4547	29.9	2.58	0.76	51	124	40.85
1751	98RDD1944	308545	5527425	n/a	n/a	12.3	45	485	35590	2893	82	3.66	3.89	38	101	39.06
1752	98RDD1945	307858	5526907	2.1	-2	5.31	16	41	8363	2426	21.4	2.61	0.68	22	75	42.61
1754	98RDD1947	306822	5526065	3	-2	3.38	7	67	8762	1089	18.4	1.78	0.79	10	60	60.29
1755	98RDD1948	307030	5525656	2.3	-2	6.71	15	47	5863	1680	14.2	2	0.38	41	117	74.96
1756	98RDD1949	306870	5524873	2.3	-2	8.93	22	40	18436	2011	26.8	2.76	0.91	37	55	41.78
1757	98RDD1951	306226	5525065	1.6	-2	4.68	11	53	4785	897	15.2	1.52	1.15	15	33	35.20
1758	98RDD1952	305958	5524775	2.6	-2	9.47	34	56	34980	2813	27.5	3.3	1.46	77	81	38.49
1759	98RDD1953	306069	5526054	1.4	-2	5.06	5	74	9297	1094	20.8	1.1	0.64	13	99	58.49
1760	98RDD1954	304827	5527782	2.2	-2	14.1	25	33	28223	2914	20.6	1.8	0.72	67	87	30.39
1761	98RDD1955	304965	5529085	1.7	-2	3.07	9	24	13691	815	8.5	1.71	0.33	69	35	39.45
1762	98RDD1956	304894	5530438	3.2	-2	6.53	15	45	10218	1238	19.2	2.72	0.85	32	42	32.64
1764	98RDD1958	306634	5529705	3.1	-2	5.83	20	57	6436	1216	24.4	2.13	1.28	20	41	31.38
1765	98RDD1959	308156	5529193	2.4	-2	3.45	3	35	3990	447	10.5	0.63	0.41	6	35	50.89
1766	98RDD1961	308463	5528238	5.5	-2	5.07	23	40	13346	1381	16.3	2.28	1.32	65	40	39.81
1767	98RDD1962	309001	5527990	6.7	-2	4.83	4	44	2854	772	19.9	1.4	0.28	9	70	64.23
1768	98RDD1963	309214	5528071	11	-2	10.06	25	82	34421	3095	28.8	2.81	0.96	54	95	41.37
1769	98RDD1964	309882	5528733	12	-2	6.36	11	106	10867	1906	19.8	3.4	0.76	34	64	59.55
1770	98RDD1965	310619	5528951	13	-2	35.1	43	99	124118	2736	39.1	3.47	1.94	151	180	39.74
1771	98RDD1966	311551	5530753	2.6	-2	4.52	17	33	7509	1311	17.1	2.48	0.43	32	54	48.79
1773	98RDD1968	309095	5530088	3.6	-2	12.02	33	53	27156	2262	23	2.95	0.6	76	84	52.82
1774	98RDD1969	308652	5529421	3.8	-2	6.5	23	41	12915	1429	22.7	3.57	0.77	44	55	38.77

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method----->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 15	Units----->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
1775	98RDD1971	308190	5529621	3	-2	6.34	7	46	9507	1185	11.5	75.62	8.95	30	290	36.98
1776	98RDD1972	307614	5530734	4	-2	5.28	12	36	6182	1410	19.6	2.68	0.76	15	47	37.74
1777	98RDD1973	309248	5531709	2	-2	3.14	5	37	5729	964	12.9	1.23	0.32	22	76	58.62
1778	98RDD1974	308615	5533180	1.9	-2	19.46	20	30	25762	2273	22.5	3.52	0.65	53	80	33.99
1779	98RDD1975	309684	5533321	2.1	-2	19.34	28	32	18836	2869	27.2	3.68	0.76	44	85	34.46
1781	98RDD1977	310071	5533690	3.1	-2	23.19	25	36	21045	2483	25.2	6.15	0.88	51	87	36.99
1782	98RDD1978	310609	5533164	1.4	-2	4.28	20	33	10655	1979	16.5	2.49	0.53	35	35	34.29
1783	98RDD1979	311341	5533699	1.1	-2	3.1	8	32	5080	1361	11.1	2.52	0.57	18	28	30.27
1784	98RDD1981	310561	5534205	8.2	-2	52.85	25	38	25656	2603	33	19.84	0.85	61	130	37.22
1786	98RDD1983	311851	5535601	3.4	-2	35.27	30	64	43246	3300	32.7	3.54	1.06	96	182	45.46
1787	98RDD1984	312136	5535138	1.1	-2	4.82	15	36	6324	1340	16.1	1.72	0.56	16	45	39.42
1789	98RDD1986	312699	5535189	2.3	-2	8.05	14	85	7207	1143	24.2	2.65	1.42	29	59	40.14
1791	98RDD1988	310912	5537541	0.5	-2	6.45	17	18	7796	2493	18.7	2.48	0.33	18	29	29.98
1792	98RDD1989	311557	5538408	1.4	-2	-1	-1	64	24625	1474	-5	1159.42	192.97	65	-5	47.45
1794	98RDD1992	310048	5539312	0.5	-2	1.87	11	25	2930	1587	12.1	1.85	0.37	14	28	34.25
1795	98RDD1993	311043	5541010	1.3	-2	7.42	20	48	12342	2076	27.5	2.64	0.71	47	65	47.09
1796	98RDD1994	312568	5541514	2	-2	13.91	31	75	42503	2225	24.9	4.51	1.23	93	93	40.00
1798	98RDD1996	313734	5541009	1.5	-2	8.96	29	52	14177	1068	25.1	1.86	2.44	54	57	50.62
1799	98RDD1997	314347	5541364	1.4	-2	17.71	20	37	29694	1597	19.9	1.94	1.12	56	67	13.21
1800	98RDD1998	315605	5541230	1.9	-2	15.29	30	67	41455	2456	35.7	3.17	1.74	77	106	34.03
1801	98RDD1999	314972	5540233	1.2	-2	6.06	18	39	10729	1480	21.6	2.41	0.91	34	54	41.05
1802	98RDD2001	314477	5539501	1.3	-2	5.36	8	53	11923	1165	13.2	3.12	0.68	55	90	58.80
1803	98RDD2002	315408	5539033	1.9	-2	4.06	15	25	18990	957	13.9	3.37	0.6	40	144	74.30
1804	98RDD2003	314416	5538625	1.6	-2	4.54	15	26	6102	2087	13	3.81	1.01	30	54	35.95
1805	98RDD2004	313424	5536327	3.4	4	24.23	27	193	28037	3300	58.6	6.09	2.51	68	122	43.21
1807	98RDD2006	315551	5535209	1.5	-2	8.74	29	92	11647	4113	38.2	5.52	1.66	35	96	27.06
1808	98RDD2007	315277	5534664	16	-2	10.55	35	70	123498	2969	67.1	20.3	0.98	41	99	58.02
1809	98RDD2008	315251	5534391	6.7	-2	5.11	24	51	8239	1621	23.9	4.21	0.43	33	173	77.77
1810	98RDD2009	314777	5533977	15	-2	6.53	37	37	14706	4920	23.2	4.69	0.51	41	55	31.21
1811	98RDD2011	315531	5532971	22	2	5.91	22	124	14321	1538	94.8	1.48	1	10	60	39.11
1813	98RDD2013	313953	5531981	2.9	-2	4.37	14	31	6176	1443	16.3	2.19	1.16	11	32	42.81
1814	98RDD2014	314157	5531433	7.1	-2	5.55	17	38	6259	1919	23.1	2.86	0.52	18	72	48.23
1815	98RDD2015	314729	5531410	58.1	-2	8.22	144	158	36631	2987	103.9	2.5	3.95	28	122	54.30
1817	98RDD2017	314344	5529531	6	-2	6.22	11	47	7045	1244	19.4	1.86	0.75	38	55	36.61
1819	98RDD2019	312124	5529536	9.2	-2	36.33	37	68	88903	3582	35.8	3.57	2.21	102	177	35.52
1820	98RDD2021	312416	5529105	27	-2	17.44	23	176	31191	4473	47	4.85	6.69	48	93	36.18
1821	98RDD2022	312059	5528918	18	4	3.02	8	112	4059	892	18.1	1.64	0.86	10	69	59.80
1822	98RDD2023	311914	5528347	6.1	-2	19.83	34	71	60054	3136	32.1	3.46	2.23	93	141	40.93
1823	98RDD2024	310523	5527607	6.3	-2	26.16	38	69	81426	3048	30.5	3.48	2.67	109	169	39.85
1824	98RDD2025	309958	5527491	6.4	-2	25.32	32	65	46204	3434	33.6	3.69	3	77	154	38.92
1825	98RDD2026	310169	5526604	4.4	-2	11.58	29	83	27581	2477	32.7	2.85	2.7	47	88	50.81
1826	98RDD2027	310496	5526855	3.8	3	7.46	19	99	20925	1411	25.1	2.11	1.34	56	64	49.35
1827	98RDD2028	311620	5526753	6	-2	10.23	21	123	18662	2092	20.2	2.85	1.14	56	79	41.18
1828	98RDD2029	311829	5526543	5.3	-2	2.75	29	92	7481	1840	12.6	4.29	2.3	91	28	68.43
1829	98RDD2031	311927	5525869	7.4	-2	14.24	17	88	28422	1494	25.2	3.02	1.98	48	96	60.03
1830	98RDD2032	311789	5525446	2.9	-2	13.32	20	109	31122	1234	27.5	2.62	1.3	57	107	53.91
1831	98RDD2033	311377	5524536	6.3	-2	22.32	40	40	77011	3721	29.3	2.28	1.04	159	166	44.43
1832	98RDD2034	311052	5523754	3.9	-2	8.33	33	28	23147	3380	20.2	3.33	0.82	77	91	42.53
1833	98RDD2035	312311	5521432	2.6	-2	2.79	12	23	10368	1443	11.4	1.39	0.34	31	42	41.95
1834	98RDD2036	313000	5519327	3.7	-2	6.35	15	52	13263	1501	26	2.99	0.55	47	66	44.15
1835	98RDD2037	309775	5516657	4.4	-2	11.22	30	53	43015	3200	31.3	3.35	1.15	82	117	42.52
1836	98RDD2038	309359	5514066	2	-2	4.88	14	24	9379	1604	18.4	2.06	0.58	24	41	37.99
1837	98RDD2039	308791	5512337	1.3	-2	2.03	17	18	17190	1722	9.2	2.8	0.52	53	39	49.17
1839	98RDD2042	309000	5508665	3.9	-2	4.15	25	95	2120	1492	19.4	2.2	2.14	17	1138	62.47
1840	98RDD2043	308973	5512749	0.5	-2	2.39	11	27	5457	1062	9.8	1.57	0.34	18	450	36.96
1841	98RDD2044	310857	5512748	2.8	-2	3.59	13	41	8992	1690	16.8	2.62	0.49	37	151	63.31
1843	98RDD2046	316781	5514722	13	2	4.65	44	196	6830	1975	30	2.14	3.7	40	50	36.76
1844	98RDD2047	317632	5517981	6.3	3	11.13	21	102	53798	3194	17.5	5.66	0.9	179	48	53.31
1846	98RDD2049	316691	5519829	2	-2	10.9	14	47	18798	1434	18.7	1.98	0.78	42	85	67.52
1847	98RDD2051	316418	5520535	1.8	-2	2.01	8	26	4346	977	8.3	3.34	0.76	20	10	49.63
1848	98RDD2052	316723	5522879	3.4	-2	9.14	18	86	12388	1059	19.6	2.49	1.49	46	89	53.59
1849	98RDD2053	316750	5523119	2.4	-2	4.92	16	50	9944	1776	20.6	1.56	0.98	22	60	37.76
1850	98RDD2054	317138	5524997	2.1	-2	4.36	15	35	9614	1876	12.6	3.47	1.17	40	32	43.96
1851	98RDD2055	317677	5527034	2.8	-2	3.56	17	150	11090	970	13	5.81	1.92	106	109	56.77
1852	98RDD2056	318008	5527149	2.4	-2	3.89	10	41	6979	916	13.8	3.98	1	26	30	36.56
1853	98RDD2057	317817	5529327	32	2	19.62	38	79	45405	3730	28.7	5.28	1.57	114	150	46.42

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 16	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
1854	98RDD2058	317900	5532085	6.7	3	8.57	15	112	10276	1472	33.4	2.32	0.91	12	76	53.45
1855	98RDD2059	317802	5533731	56.1	-2	12.01	61	189	15524	3751	56.6	3.06	1.62	41	132	54.20
1856	98RDD2061	317585	5534265	29	-2	5.38	20	121	7090	1288	46.3	2.26	0.93	12	59	50.25
1857	98RDD2062	317284	5534531	7.7	-2	8.25	49	65	5300	2145	42	1.69	1.36	15	65	59.45
1858	98RDD2063	316470	5533714	7.3	-2	9.31	29	112	4369	1238	37.3	1.54	0.79	8	60	64.16
1859	98RDD2064	316046	5534387	8.9	-2	9.97	40	69	34932	2842	64.9	2.59	1.95	90	83	62.63
1860	98RDD2065	316371	5535621	3.5	-2	6.38	30	79	12944	3385	29.4	3.5	2.68	29	93	55.56
1861	98RDD2066	315982	5536361	5.5	-2	42.85	50	114	59141	4136	93	3.27	2.29	86	251	37.18
1862	98RDD2067	316160	5536851	3.6	-2	38.01	36	61	41928	4550	54.8	2.7	1.29	62	184	31.18
1863	98RDD2068	316538	5537453	2.5	-2	40.29	57	90	72715	6098	77.9	3	1.8	96	162	42.66
1864	98RDD2069	318194	5537835	2.8	-2	20.19	66	107	46952	6689	87.8	4.74	1.74	98	184	46.41
1865	98RDD2071	318120	5536790	1.8	-2	11.94	75	100	16487	7037	89.6	4.36	1.83	28	72	32.41
1866	98RDD2072	317637	5535887	10	-2	8.43	19	80	12724	1905	45.4	3.35	1.3	12	65	48.22
1867	98RDD2073	319575	5536534	12	6	25.2	114	295	46138	9815	124.3	9.1	1.5	43	74	29.51
1869	98RDD2075	320007	5537581	4	5	7.5	31	71	21623	6400	27.2	3.66	10.5	43	124	64.56
1870	98RDD2076	320223	5537782	2.2	4	6.82	81	187	20802	4876	91.9	4.38	3.93	47	52	41.58
1871	98RDD2077	319846	5538187	2.1	3	13.3	75	113	26202	4355	72	3.32	4.86	76	100	45.55
1873	98RDD2079	318325	5539597	1	-2	6.01	16	44	10230	2152	12.2	2.52	1.81	40	40	47.12
1874	98RDD2081	317714	5539490	0.5	-2	3.58	9	25	6203	1404	9.8	2.55	0.91	17	26	28.30
1875	98RDD2082	316633	5540239	1.5	-2	11.03	28	51	32030	2100	28.1	3.09	1.48	65	93	42.66
1876	98RDD2083	317571	5540822	1.5	-2	23.15	26	60	35805	2769	29.4	2.93	1.45	76	115	38.85
1877	98RDD2084	318378	5540487	5.3	-2	29.47	23	54	41968	2468	26.2	19.39	1.22	89	118	43.39
1878	98RDD2085	320639	5540859	1.2	-2	14.74	28	79	54469	2009	23.8	3.25	2.25	107	79	34.40
1879	98RDD2086	319968	5540119	1.8	-2	25.94	25	62	60265	1778	24	4.43	1.38	109	104	41.79
1880	98RDD2087	320283	5539511	2.1	-2	28.09	31	71	66019	2987	28.6	3.01	1.69	112	129	37.40
1881	98RDD2088	320961	5539267	3.2	-2	54.52	38	136	69510	3918	57	3.45	3.39	109	165	41.93
1882	98RDD2089	323842	5540254	2.5	-2	22.32	26	95	30535	1389	26.5	2.31	2.88	44	100	46.28
1883	98RDD2091	324685	5540331	1.6	-2	8.26	16	73	8838	1629	15.8	n/a	1.86	55	70	53.21
1884	98RDD2092	326229	5540612	1	-2	2.4	20	35	6096	1361	14.1	n/a	0.95	15	25	46.20
1885	98RDD2093	326546	5540230	1.6	-2	7.16	20	37	22846	2084	17.8	n/a	0.87	45	68	60.05
1886	98RDD2094	327276	5540854	1.7	-2	6.71	22	44	18438	1256	17.3	n/a	1.06	64	56	50.87
1887	98RDD2095	328749	5541003	1.6	-2	9.86	23	52	14564	1418	18.2	n/a	1.45	47	49	50.79
1888	98RDD2096	326834	5539627	1.6	-2	10.62	24	106	18677	2173	19.5	n/a	2.39	57	58	44.92
1889	98RDD2097	326386	5539765	1	-2	8.91	21	100	10208	1952	32	n/a	3.48	21	63	54.32
1890	98RDD2098	326590	5537111	2.6	-2	10.3	42	117	24490	6777	36	n/a	2.75	80	78	34.88
1891	98RDD2099	323523	5536338	4.9	-2	3.3	24	45	3905	2516	28.5	n/a	1.52	9	51	64.67
1892	98RDD2101	323044	5536810	3.1	-2	2.34	7	27	2493	2104	17.6	n/a	0.36	-5	41	57.73
1893	98RDD2102	322196	5537581	3.7	3	68.55	45	58	51279	9699	65.3	n/a	2.09	73	169	27.91
1894	98RDD2103	321060	5537362	7.7	3	61.77	68	137	47898	8615	133.8	n/a	3.96	73	215	38.12
1895	98RDD2104	323657	5533822	4.4	2	7.22	39	98	9039	4576	49.4	n/a	1.63	24	76	33.22
1897	98RDD2106	323898	5531989	31	-2	42.77	47	109	165803	3802	44.3	n/a	2.88	212	199	42.89
1898	98RDD2107	323097	5532550	7.3	-2	4.81	18	135	4875	2521	19.7	n/a	1.75	20	63	60.45
1899	98RDD2108	322047	5532306	8.5	3	3.27	23	191	6485	2818	32.1	n/a	2.01	24	37	40.78
1900	98RDD2109	320579	5532216	25	-2	15.83	37	131	44297	1811	56.8	n/a	1.12	88	105	59.95
1901	98RDD2111	321236	5531787	41	-2	43.63	39	97	162595	3401	37.9	n/a	2.2	150	193	40.20
1902	98RDD2112	321384	5530761	3.9	-2	5.08	16	97	6555	4775	18	n/a	1.15	27	33	36.98
1903	98RDD2113	321994	5530646	2.8	4	5.54	14	121	5380	2545	24.4	n/a	0.96	26	31	36.99
1905	98RDD2115	323288	5529521	2.1	-2	3.49	13	57	3952	1625	19.6	n/a	0.85	20	32	49.88
1906	98RDD2116	325914	5529633	58.8	4	15.56	36	196	79182	13744	51.2	n/a	4.35	150	85	43.68
1907	98RDD2117	325690	5529028	34	-2	5.02	16	125	18514	4417	32.3	n/a	1.85	65	43	69.37
1908	98RDD2118	327576	5528874	2.8	4	11.07	21	157	17245	2212	30.7	n/a	1.49	85	77	50.54
1909	98RDD2119	328298	5530276	1.8	3	7.11	16	123	10909	2575	32.7	n/a	0.85	37	55	51.08
1910	98RDD2121	329403	5533120	0.5	-2	5.62	14	122	11595	2611	29.2	n/a	0.87	34	53	54.04
1911	98RDD2122	328951	5531442	1.6	3	3.98	12	106	6598	2549	25.8	n/a	0.66	24	44	44.92
1912	98RDD2123	329970	5529065	1.3	-2	5.62	15	89	11386	2339	18.8	n/a	0.67	61	48	38.73
1913	98RDD2124	329794	5528451	1.5	2	5	12	86	10789	2130	18.6	n/a	0.58	47	58	45.50
1914	98RDD2125	329017	5529028	1.7	2	4.5	12	75	7913	2215	18.8	n/a	0.75	39	45	38.10
1915	98RDD2126	328110	5528142	2.1	6	10.22	27	245	15558	3006	40.5	n/a	2.24	73	92	42.35
1916	98RDD2127	325963	5528249	14	-2	10.75	30	197	18922	10082	47.8	n/a	4.35	126	75	47.76
1917	98RDD2128	323883	5528483	1.5	2	4.36	9	73	4836	1907	23.5	n/a	0.69	18	32	32.97
1918	98RDD2129	322687	5527520	2	-2	7.97	11	85	13258	2424	32.9	n/a	0.85	54	75	49.70
1919	98RDD2131	323138	5525214	2.6	-2	9.05	13	102	10884	4944	36.3	n/a	1.05	26	60	43.71
1920	98RDD2132	322678	5523861	9	-2	17.76	17	50	23718	8740	23.3	n/a	2.77	43	93	45.30
1921	98RDD2133	322426	5522400	8.2	3	4.35	12	259	11548	2854	23.8	n/a	3.28	82	43	40.19
1922	98RDD2134	321864	5522578	2.3	9	12.14	34	420	33603	13924	72.5	n/a	0.66	130	114	32.31
1923	98RDD2135	321057	5522406	2.6	7	15.33	14	373	14850	6993	49.2	n/a	1.04	98	78	40.77

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 16	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
1924	98RDD2136	320931	5522222	3.3	4	3.8	17	212	7243	3548	22	n/a	1.3	80	41	37.83
1925	98RDD2137	320538	5522841	4	-2	11.1	20	72	17797	7097	22.1	n/a	1.63	47	65	40.96
1926	98RDD2138	322025	5521033	4.7	-2	6.18	12	163	5191	2706	36.8	n/a	4.14	43	48	52.86
1927	98RDD2139	321715	5520518	5.2	-2	2.75	9	112	2573	1571	23.6	n/a	2.52	31	55	66.76
1928	98RDD2141	321811	5519763	1.8	-2	2.47	9	112	2614	1431	19.3	n/a	1.48	20	22	36.39
1929	98RDD2142	320506	5518319	2.5	-2	11.16	24	64	26028	7027	25.4	n/a	1.14	87	66	35.55
1930	98RDD2143	319958	5518111	1.6	-2	8.65	19	46	16923	7010	19.4	n/a	1.1	62	49	24.88
1931	98RDD2144	319403	5512122	3.7	-2	9.35	8	24	7983	1529	52.7	n/a	0.29	8	160	79.02
1932	98RDD2145	315985	5507326	1.4	-2	2.58	7	28	4057	913	13.2	n/a	0.26	12	21	38.84
1933	98RDD2146	312201	5502724	1.9	-2	5.15	16	41	10059	1937	17.7	n/a	0.63	41	52	43.78
1934	98RDD2147	309903	5507832	3	-2	3.35	9	41	5991	1750	13.4	n/a	0.47	38	115	63.70
1935	98RDD2148	311069	5509085	2.1	-2	4.45	14	33	13906	1874	19.7	n/a	0.42	52	67	45.90
1937	98RDD2151	318307	5513137	1.9	-2	6.24	18	48	16527	2491	16.5	n/a	1.1	75	43	35.91
1938	98RDD2152	318152	5519176	2	-2	2.97	10	26	6404	1177	11.4	n/a	0.45	21	28	35.58
1939	98RDD2153	317506	5520961	2.8	3	5.85	22	56	10968	2185	19.7	n/a	0.81	49	54	42.09
1940	98RDD2154	317739	5521589	1.9	-2	6.58	13	48	9802	2426	19.6	n/a	0.7	30	34	40.72
1941	98RDD2155	315256	5520371	2.1	-2	3.79	11	86	10299	1142	19.3	n/a	0.7	30	44	50.85
1942	98RDD2156	314002	5521623	3.2	-2	4.63	10	37	6105	1311	17.5	n/a	0.44	18	29	41.36
1943	98RDD2157	315459	5523697	4.3	-2	4.12	11	32	3808	1369	15.2	n/a	1.03	13	56	50.18
1944	98RDD2158	317539	5523009	3.2	-2	4.82	14	60	7666	1500	19.9	n/a	0.94	25	44	44.27
1945	98RDD2159	319485	5522926	3.1	-2	8.14	17	44	16028	3125	20.2	n/a	1.21	36	61	41.42
1948	98RDD2161	318444	5524499	2.2	-2	6.76	17	31	8947	2011	16.1	n/a	1.1	17	47	48.30
1947	98RDD2162	319044	5526822	4.6	-2	5.16	16	81	10294	1378	17.1	n/a	2.08	45	66	57.43
1948	98RDD2163	317019	5528285	9.3	-2	22.32	34	80	42200	3784	29.9	n/a	2.64	135	192	47.57
1949	98RDD2164	316475	5527803	9.3	-2	25.21	35	90	45728	4015	31	n/a	5.19	127	183	48.05
1950	98RDD2165	315911	5528087	32	-2	29.09	27	277	49752	10974	60.3	n/a	4.39	76	110	17.74
1951	98RDD2166	315141	5527541	6.8	-2	24.52	38	50	52642	3362	30	n/a	1.43	124	157	44.52
1952	98RDD2167	314656	5527990	23	-2	27.09	57	98	103033	3428	47.5	n/a	1.91	147	280	48.54
1953	98RDD2168	313959	5527474	5.6	-2	5.38	13	55	9304	1253	14.7	n/a	1.33	31	57	51.66
1954	98RDD2169	314352	5526721	3.3	-2	-1	-1	71	3886	957	-5	n/a	-0.02	13	-5	53.49
1955	98RDD2171	313703	5526167	2.4	-2	13.5	25	28	23771	4763	19.1	n/a	0.77	65	122	28.45
1956	98RDD2172	313706	5525195	12	-2	2.77	10	73	12282	1490	20.7	n/a	1.08	37	74	65.38
1957	98RDD2173	313310	5524325	18	-2	3.74	29	39	4429	1680	12.6	n/a	2.48	18	64	72.62
1958	98RDD2174	312675	5525561	5.9	-2	25.87	29	39	33803	4789	26.9	n/a	1	83	184	36.12
1959	98RDD2175	312305	5526773	22	3	9.74	27	92	127209	1775	16.9	n/a	1.93	142	78	53.25
1960	98RDD2176	312982	5527186	7.2	13	5.95	15	78	9352	1216	15.2	n/a	1.47	49	70	50.65
1962	98RDD2178	313417	5528411	10	-2	4.45	14	78	11253	1656	18.7	n/a	1.29	27	67	54.40
1963	98RDD2179	315162	5528554	5.3	-2	5.6	-1	65	7690	1170	22.5	n/a	3.36	28	118	60.52
1964	98RDD2181	315270	5528937	1.7	-2	3.71	5	47	2803	791	15.6	n/a	0.31	8	36	42.02
1965	98RDD2182	315158	5529319	8.8	-2	15.47	48	64	45428	3972	34.4	n/a	1.98	63	156	36.43
1966	98RDD2183	315822	5529668	17	-2	23.63	45	65	57879	4386	40.2	n/a	2.85	68	157	32.09
1967	98RDD2184	315116	5529912	12	-2	26.6	43	61	47915	3909	35.5	n/a	2.18	75	158	38.30
1968	98RDD2185	315498	5530446	35	-2	8.04	69	85	31470	1580	31.7	n/a	4.74	46	70	63.22
1969	98RDD2186	316604	5530187	69.9	2	6.05	21	111	6577	1203	27.1	n/a	1.09	15	59	51.48
1970	98RDD2187	317048	5530228	23	-2	8.22	21	61	4952	1524	24.5	n/a	0.62	23	81	65.12
1971	98RDD2188	316596	5530785	18	-2	5.4	18	101	12391	1610	28.9	n/a	1.05	19	49	49.71
1972	98RDD2189	316498	5531410	26	-2	9.91	42	100	29207	1841	43.4	n/a	0.97	82	100	64.65
1973	98RDD2191	316994	5531271	6.2	-2	3.29	14	48	3339	1072	26.1	n/a	0.57	9	81	66.95
1975	98RDD2193	318835	5531344	27	6	9.22	29	184	14527	3709	30.8	n/a	0.67	17	70	32.82
1976	98RDD2194	319284	5532206	34	28	21.08	62	81	28353	3278	53.6	n/a	1.49	51	100	51.49
1977	98RDD2195	319351	5532898	27	-2	16.98	66	98	28395	4176	48.8	n/a	1.46	52	90	41.09
1978	98RDD2196	319530	5533771	3.6	-2	10.95	65	113	7142	2739	65.1	n/a	1.05	21	73	48.32
1979	98RDD2197	319846	5532314	23	-2	6.94	38	103	12061	1832	82.3	n/a	1.14	14	68	70.15
1980	98RDD2198	320377	5531585	33	-2	25.74	39	84	64582	2599	35.5	n/a	1.8	110	175	49.50
1981	98RDD2199	319432	5530307	26	-2	42.97	43	77	69713	4295	40.5	n/a	1.84	113	214	42.81
1982	98RDD2201	319682	5529822	15	-2	4.42	13	27	3619	1410	17.4	n/a	0.55	14	43	45.54
1983	98RDD2202	319384	5528222	16	-2	3.43	14	39	3298	1419	19.4	n/a	1.09	13	51	46.74
1984	98RDD2203	324292	5526589	3.3	-2	11.83	12	99	8521	4996	43.3	n/a	0.57	45	167	64.10
1985	98RDD2204	325349	5525627	3.6	-2	4.47	11	127	8350	4471	43	n/a	3.51	26	53	50.02
1986	98RDD2205	326013	5525091	5.2	-2	8.91	21	166	15377	4337	22.6	n/a	3.15	92	89	54.31
1991	98RDD2211	326686	5524138	6.5	-2	4.78	12	63	8257	2895	19.4	n/a	1.83	41	60	74.72
1994	98RDD2214	325802	5522289	20	-2	26.4	31	123	75710	7466	25.5	n/a	5.48	144	95	44.02
1995	98RDD2215	325572	5521657	29	-2	42.03	34	129	117214	6512	27.6	n/a	5.83	181	105	42.43
1996	98RDD2216	325321	5521089	7.6	-2	10.83	28	115	24012	5925	22	n/a	3.4	123	90	45.94
1997	98RDD2217	327613	5521623	4.4	-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	81.26
1999	98RDD2219	329874	5519397	3.9	-2	6.69	8	15	14099	1191	14.3	n/a	0.18	17	68	51.54

SITE	Lake	EASTING	NORTHING	As	Au	Co	Cr	Cu	Fe	Mg	Ni	Pb	U	V	Zn	LOI
	Sediment	NAD 27	Method---->	INAA	INAA	ICP-MS	ICP-MS	ICP-OES	ICP-OES	ICP-OES	ICP-MS	ICP-MS	ICP-MS	ICP-OES	ICP-MS	Grav.
	Sample #	UTM Zone 15	Units---------->	PPM	PPB	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
			Detection Limit-->	0.5	2	1	1	5	5	20	5	0.1	0.02	5	5	0.1
2002	98RDD2222	326855	5517581	5	8	26.29	27	255	55134	9276	79.4	n/a	2.78	118	99	35.63
2003	98RDD2223	327628	5514168	3.9	-2	7.48	14	50	11349	3412	34.3	n/a	1.09	37	108	44.10
2004	98RDD2224	326145	5517046	3.8	6	31.64	25	268	62818	17056	101	n/a	2.17	144	112	36.62
2005	98RDD2225	325480	5516936	5.2	6	8.74	11	201	10176	4175	59.3	n/a	5.23	51	167	57.19
2006	98RDD2226	326170	5517831	4.4	-2	16.45	25	80	33566	23203	31.3	n/a	1.14	74	97	5.85
2008	98RDD2228	324166	5517527	5.1	-2	-1	-1	20	7371	2238	-5	n/a	-0.02	32	2779	79.31
2009	98RDD2229	324396	5518363	24	-2	13.42	41	203	26149	5223	37.2	n/a	2.92	78	78	31.66
2010	98RDD2231	324243	5519235	11	-2	15.02	42	137	32180	5814	27.3	n/a	2.15	101	111	36.47
2011	98RDD2232	324016	5521088	1.9	-2	5.48	30	108	9350	9396	22.2	n/a	0.74	21	61	34.96
2012	98RDD2233	322924	5519262	3.6	-2	4.26	13	113	5290	4065	32	n/a	2.55	29	60	68.24
2013	98RDD2234	322607	5518105	9.4	3	3.29	15	63	13614	3907	14.3	n/a	2.05	105	56	66.86
2016	98RDD2237	323657	5515042	1.8	3	14.81	11	133	19699	4714	65.5	n/a	0.63	54	86	45.48
2017	98RDD2238	324337	5514326	1.5	3	9.54	7	157	16794	2425	38.1	n/a	0.41	48	94	53.01
2018	98RDD2239	323733	5511288	1.7	-2	6.36	8	48	6479	1785	32	n/a	0.27	18	50	45.92
2019	98RDD2241	319670	5511914	2.9	-2	6.94	7	27	6097	1426	41.7	n/a	0.2	8	52	70.69
2020	98RDD2242	319461	5511365	2.2	2	4.72	8	83	9706	2212	32.7	n/a	0.58	28	48	50.44
2021	98RDD2243	318994	5510955	2.6	-2	5.59	9	54	11527	1586	32.9	n/a	0.38	26	49	47.67
2022	98RDD2244	319327	5509969	2.9	5	4.64	8	259	8698	6494	27.3	n/a	0.83	54	67	42.78
2023	98RDD2245	316152	5505578	1.9	3	7.69	21	41	20428	2963	26.1	n/a	0.46	41	92	30.81
2024	98RDD2246	309452	5504282	2.1	-2	8.07	25	22	26414	3212	17	n/a	0.9	59	93	21.62
2027	98RDD2249	301058	5482196	1.8	-2	2.92	9	21	4478	1396	12.4	n/a	0.31	10	32	40.33
2028	98RDD2251	300148	5479026	1.3	-2	3.42	9	23	6986	2402	12.6	3.64	0.49	18	44	36.27
2029	98RDD2252	307229	5483076	2.7	-2	5.99	9	28	5207	1911	23.3	2.84	0.37	17	47	57.44
2030	98RDD2253	308547	5480180	30	-2	10.35	26	60	22582	6048	27.9	3.78	1.93	186	140	61.02
2031	98RDD2254	308918	5480609	17	3	16.51	39	69	19855	9393	38.5	3.8	2.21	134	112	52.13
2032	98RDD2255	309691	5480910	4.3	-2	12.28	42	67	14418	7545	38.2	3.87	0.52	157	137	38.15
2033	98RDD2256	311081	5481699	2	-2	15.76	41	95	14705	9091	46.4	3.14	0.82	170	108	62.96
2034	98RDD2257	311306	5482353	10	-2	19.18	39	116	27966	10150	42	3.71	1.52	278	144	56.00
2035	98RDD2258	311838	5482192	5.3	-2	20.53	62	122	32345	14229	62.1	4.68	4.83	258	125	39.40
2036	98RDD2259	312586	5483197	10	-2	15.83	35	88	16577	10651	39.3	4.56	5.64	160	123	65.33
2037	98RDD2261	311741	5484056	68.6	-2	18.24	36	103	35170	12184	37.9	3.76	3.38	213	96	49.06
2038	98RDD2262	312285	5484153	5.5	-2	11.43	28	78	19276	5694	31.6	3.57	1.34	186	148	58.73
2039	98RDD2263	312829	5484369	2.4	-2	16.77	48	101	15489	8556	54.1	4.54	0.58	170	171	49.34
2040	98RDD2264	313335	5484706	n/a	n/a	11.39	27	31	19486	7443	29.9	2.59	0.58	108	69	12.31
2041	98RDD2265	313351	5485075	4.2	-2	16.46	35	126	24553	6538	48.5	3.54	0.62	242	261	60.12
2042	98RDD2266	313967	5484145	5.7	-2	12.47	30	88	26344	8094	42.3	4.14	1.7	200	152	60.13
2043	98RDD2267	316396	5485267	7.6	-2	28.29	54	132	35677	15941	65.7	5.15	5.74	327	117	41.10
2044	98RDD2268	316991	5485525	15	3	20.66	82	162	29367	19126	57.5	5.83	6.9	340	108	46.28
2046	98RDD2271	327851	5479907	3.5	-2	5.87	12	17	7754	3082	19.2	3.15	0.24	14	99	58.64
2047	98RDD2272	332583	5479260	2.4	6	17.35	10	293	53177	1359	16.4	1.92	0.49	148	129	66.84
2048	98RDD2273	333099	5479367	1.7	12	6.88	4	1010	9419	1044	11	1.53	0.43	57	134	48.25
2049	98RDD2274	333092	5480129	3.9	7	4.14	6	382	21998	1754	12.3	1.65	0.34	122	110	58.23
2050	98RDD2275	333089	5481118	2.6	9	20.96	8	935	50478	2264	24.4	3.36	0.66	150	118	52.47
2051	98RDD2276	332236	5481595	2.6	10	35.95	15	926	35004	2792	19.8	3.44	0.69	179	193	50.80
2052	98RDD2277	333167	5481995	1.9	9	27.91	8	906	48681	1636	20.1	1.71	0.53	106	180	59.67
2053	98RDD2278	333304	5482521	1.2	5	6.34	7	600	14006	2084	15.8	1.38	0.47	59	127	48.22
2054	98RDD2279	333230	5482875	1.5	7	13.72	13	433	27749	4248	19.5	2.65	0.64	107	77	44.34
2055	98RDD2281	333711	5483968	4	6	17.96	14	926	119991	2817	20.4	2.29	1.04	130	139	49.59
2056	98RDD2282	333161	5484233	2.8	4	13.77	18	158	23001	7262	31.1	2.38	1.33	69	82	22.83
2057	98RDD2283	333006	5485029	5.5	4	23.39	488	225	30839	5075	61.8	1.94	0.73	56	135	55.86
2058	98RDD2284	331583	5485196	n/a	n/a	8.23	12	29	14341	8216	15.4	1.99	0.45	51	35	2.93
2059	98RDD2285	331645	5483199	3.7	8	29.14	25	523	63133	9281	32.3	4.91	1.08	192	145	21.24
2060	98RDD2286	331396	5482630	1.7	10	13.03	19	647	35081	6266	21.8	3.55	0.75	155	106	28.59
2061	98RDD2287	331021	5483132	2.4	9	13.55	9	721	22613	2501	20.6	2.93	0.59	136	100	46.72
2062	98RDD2288	330368	5482616	2.6	13	21.91	11	1255	41860	1655	24.5	2.23	0.79	134	120	59.11
2063	98RDD2289	330252	5483938	1.8	8	10.14	15	497	20794	2953	16.6	2.86	0.6	167	91	50.35
2064	98RDD2291	330259	5484256	2.3	8	14	14	393	35819	2858	18.3	3.66	0.68	164	87	49.21
2065	98RDD2292	326134	5484027	1.5	3	3.08	6	168	4000	1348	12.8	2.25	0.4	13	30	35.69
2066	98RDD2293	327722	5484186	2.6	-2	7.47	15	106	9931	1953	21	3.45	0.68	62	96	54.25
2068	98RDD2295	328667	5498308	1	3	7.76	30	181	10631	6375	32.3	4.12	0.38	64	120	37.12
2069	98RDD2296	327991	5501949	2	3	3.61	8	107	5105	1331	16.2	3.75	0.19	17	36	42.10
2070	98RDD2297	328383	5502135	2.1	3	5.14	8	185	6710	1683	21.6	2.31	0.32	27	58	49.58
2072	98RDD2299	328941	5507138	1.5	4	9.4	18	137	17290	7263	25.8	2.6	0.68	65	78	38.98
2073	98RDD2301	327441	5505720	1.6	3	5.05	11	128	7416	2251	22	3.18	0.4	30	42	33.24
2074	98RDD2302	328307	5504253	4.6	3	6.2	11	86	6559	1895	25.6	9.72	0.41	27	62	62.18
2075	98RDD2303	327237	5503851	2.6	4	7.76	15	105	5490	1927	29.9	3.23	0.34	32	72	65.42

SITE	Lake Sediment Sample #	EASTING NAD 27 UTM Zone 18	NORTHING Method----> Units----------> Detection Limit-->	As INAA PPM 0.5	Au INAA PPB 2	Co ICP-MS ppm 1	Cr ICP-MS ppm 1	Cu ICP-OES ppm 5	Fe ICP-OES ppm 5	Mg ICP-OES ppm 20	Ni ICP-MS ppm 5	Pb ICP-MS ppm 0.1	U ICP-MS ppm 0.02	V ICP-OES ppm 5	Zn ICP-MS ppm 5	LOI Grav. % 0.1
2076	98RDD2304	326144	5502656	1.4	-2	6.08	13	128	6733	2252	31.4	2.3	0.52	40	63	53.39
2077	98RDD2305	320468	5501090	1.2	-2	7.24	13	22	11594	2811	12.2	2.01	1.18	44	45	12.89
2078	98RDD2306	320268	5502050	3.5	-2	8.47	15	103	10003	1919	13.3	12.55	0.47	83	81	12.13
2079	98RDD2307	321905	5506160	3.4	-2	7.45	29	164	14607	6536	30	3.23	1.04	44	48	38.01
2080	98RDD2308	322334	5506415	3.7	-2	9.76	31	167	21841	8156	30.5	3.45	1.85	82	68	34.16
2081	98RDD2309	321462	5506783	2.1	-2	4.32	24	162	6830	1675	22.5	2.98	0.84	28	29	35.99
2083	98RDD2312	321027	5508034	3.9	4	12.96	23	183	32606	9976	36.5	3.22	1.43	103	90	39.04
2084	98RDD2313	322073	5507938	3.2	4	9.48	8	86	6381	1994	63.8	1.85	0.59	17	65	70.37
2085	98RDD2314	325720	5508864	1.9	-2	6.8	17	85	12850	5426	33.9	2.07	0.81	51	60	32.82
2086	98RDD2315	325968	5509119	1.9	-2	6.07	16	101	12590	4790	33.1	2.1	0.71	57	64	35.83
2087	98RDD2316	326683	5510477	8.6	-2	6.72	16	101	23508	4860	31.7	2.85	1.44	88	69	39.43
2088	98RDD2317	322767	5508399	1.7	-2	4.32	6	98	4834	1956	39.5	2.9	0.43	23	51	51.77
2089	98RDD2318	320765	5506816	3.3	7	10.17	22	211	14514	9640	41	3.92	1.28	54	55	42.60
2090	98RDD2319	320167	5508535	1.8	-2	5.82	16	95	10205	4457	23.1	3.34	1.58	28	45	49.10
2091	98RDD2321	319877	5509416	3	10	15.96	-1	485	27496	9331	43.9	15.79	8.87	93	114	41.79
2092	98RDD2322	319539	5508283	2.9	-2	9.48	-1	129	22178	5719	32.4	11.43	8.11	106	88	46.68
2093	98RDD2323	318952	5508913	2.1	3	4.23	12	129	6482	5857	19.7	3.33	1.3	27	29	34.41
2094	98RDD2324	317666	5506568	2.6	-2	4.82	6	25	3822	1207	21	4.86	0.19	6	37	54.76
2095	98RDD2325	313850	5500814	1.9	-2	10.79	20	20	28514	2736	15.6	1.95	1.07	64	70	15.70
2097	98RDD2327	311493	5501584	1.5	-2	4.12	10	66	10922	1778	14.4	2.16	0.42	52	60	49.43
2098	98RDD2328	310406	5501560	1.9	-2	7.01	18	83	17228	1947	19.3	1.86	1.22	87	49	49.80
2099	98RDD2329	307380	5500616	2.5	-2	6.01	11	23	5953	1389	16.1	3.15	0.49	28	60	51.24
2100	98RDD2333	305490	5501536	3.8	-2	19.65	36	35	100289	2647	20.5	5.84	1.47	151	150	34.28
2101	98RDD2334	306211	5503869	5.4	-2	29.64	20	53	179212	3042	45.3	3.86	1.33	160	185	29.32
2102	98RDD2335	306745	5506056	4	-2	25.7	42	39	121449	2903	23	4.17	1.77	159	151	34.38
2104	98RDD2337	307574	5501719	n/a	n/a	9.62	22	24	25678	3034	15.4	2.08	0.87	59	48	7.06
2106	98RDD2339	303599	5503925	4.3	3	31.6	40	35	104085	4709	26.7	3.2	2.51	137	182	30.12
2107	98RDD2341	303573	5504970	5.4	-2	16.78	36	35	83132	5483	24.3	3.87	2.3	103	173	24.73
2108	98RDD2342	338560	5540215	4	-2	11.72	31	62	45425	7486	31	5.26	2.86	98	72	10.38
2110	98RDD2344	333694	5538581	3.7	-2	10.36	29	46	35610	5937	25.2	4.61	1.69	68	61	11.43
2111	98RDD2345	332685	5537195	12	-2	18.73	44	85	85629	6362	46.8	6.12	2.98	118	101	21.58
2113	98RDD2347	325891	5532868	18	-2	26.5	51	138	101583	7653	76.3	6.32	5.4	172	143	25.60
2114	98RDD2348	325913	5531282	24	4	43.78	42	225	70504	12047	65.7	5.28	7.1	119	104	14.17
2115	98RDD2349	328301	5536797	7	3	14.8	48	91	41024	8214	51.8	6.12	4.7	101	100	14.32
2116	98RDD2351	324556	5535618	20	-2	36.55	46	135	168944	4844	91.5	4.74	6	140	141	35.93
2117	98RDD2352	324999	5536711	6	-2	24.29	50	95	76197	5694	56.2	4.24	3.14	109	165	35.20
2118	98RDD2353	289243	5525708	0.5	-2	10.1	10	13	29196	1220	8.7	2.32	3.05	47	63	10.11
2120	98RDD2355	289316	5523957	3.1	-2	24.01	32	56	78152	3040	22.8	7.29	10.44	120	143	31.88
2121	98RDD2356	289476	5525165	2.7	-2	11.33	22	40	41233	2049	16.6	5.9	5.78	102	114	37.34
2122	98RDD2357	290454	5524963	2.2	-2	10.54	20	37	41754	2511	17.9	3.91	5.22	72	97	34.84
2123	98RDD2358	289904	5524195	1.4	-2	5.25	11	23	17804	1448	14.8	3.03	3.11	34	48	30.78
2124	98RDD2359	292021	5525100	4	-2	46.93	37	82	140001	2799	32.1	8.51	13.23	199	199	39.44
2126	98RDD2362	293656	5525181	3.3	-2	18.29	24	46	93542	1912	15.1	5.69	5.31	156	107	38.84
2127	98RDD2363	295531	5524621	2	-2	16.59	31	59	52365	3217	27.6	4.61	9.11	126	158	32.75
2128	98RDD2364	296023	5524982	4.2	-2	13.52	20	118	22224	3013	38.9	4.75	9.04	61	96	59.28
2129	98RDD2365	261154	5483293	3.8	-2	8.67	34	41	38066	3504	19.9	4.41	6.14	100	90	39.77
2130	98RDD2366	261100	5481835	8.3	-2	7.88	16	71	29105	2899	26.3	3.86	6.7	47	65	44.66
2132	98RDD2368	261054	5480385	3.2	-2	8.31	30	32	44652	3448	17.5	3.78	5.48	96	71	23.93
2134	98RDD2371	260335	5479568	2.9	-2	8.13	31	29	50055	3080	15.6	3.1	5.08	97	70	28.19
2137	98RDD2374	261054	5475103	9.3	-2	8.8	26	46	31754	3896	20.4	4.43	5.58	77	67	40.01
2138	98RDD2375	262943	5475153	3.7	-2	6.43	24	22	25653	2594	15.4	3.69	3.3	45	73	46.56
2139	98RDD2376	263534	5474252	11	3	4.62	15	59	31952	2551	18.3	3.76	8.51	59	86	59.04
2141	98RDD2378	259508	5470851	4.3	-2	9.48	31	27	66596	3373	14.5	3.18	5.2	94	66	19.19
		Mean		3.5	-2	9.67	22.4	49	30511	2158	19.9	4.38	2.82	73.6	85.2	46.5
		Median		2.3	-2	7.23	20	33	17070	1740	17.2	3.21	1.38	57	77	44.5
		Min		-0.5	-2	-1	-1	-5	-5	-20	-5	-0.1	-0.02	-5	-5	10.1
		Max		69.9	28	83	488	1255	348497	19126	191.3	1159.42	192.97	723	2779	91.2

APPENDIX D

Summary of elements analyzed by ICP and INAA
for 34 Stream Sediment samples and 1 soil sample.

Stream Sediment Samples	Site	Easting	Northing	Ag	Al	Au	As	Ba	Br	Ca	Cd
			units	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm
			Method	ICPMS	ICPOES	INAA	INAA	ICPOES	INAA	ICPOES	ICPMS
			DL—>	0.05	30	2	0.5	3	0.5	20	0.5
98RDD-0352	317	282132	5502099	-0.05	10283	-2	2.8	55	13	5123	-0.5
98RDD-0502	452	293611	5502140	0.07	10536	-2	6.6	206	46	4186	-0.5
98RDD-0619	558	301894	5490448	-0.05	10103	-2	3	47	17	9504	-0.5
98RDD-0647	583	310138	5499160	0.09	17248	-2	1.4	55	6.6	12930	-0.5
98RDD-0969	873	264358	5466649	0.08	11860	2	2	79	37	7293	-0.5
98RDD-2012	1812	314883	5532273	-0.05	9641	-2	3.8	54	6.7	5730	-0.5
98RDD-2235	2014	321745	5518120	-0.05	36171	4	2.8	139	12	21291	-0.5
98RDD-2236	2015	322625	5517107	0.06	25836	3	5.3	143	18	17819	-0.5
98RDD-2269	2045	322155	5483492	-0.05	17166	-2	1.8	157	4.7	11727	-0.5
98RDD-2373	2136	333099	5479367	-0.05	10626	-2	1	40	7	6268	-0.5
98RDD-3001	3000	312038	5494578	-0.05	12338	-2	2.4	74	6.4	8284	-0.5
98RDD-3004	3001	308461	5490445	0.05	19457	-2	2	79	5.7	11949	-0.5
98RDD-3005	3002	299599	5497948	-0.05	15616	-2	3.6	85	14	10435	-0.5
98RDD-3006	3003	299586	5497876	-0.05	9808	-2	0.5	39	5.1	5782	-0.5
98RDD-3007	3004	301784	5495719	0.05	15105	-2	4.2	75	23	12702	1.25
98RDD-3008	3005	309882	5493023	-0.05	9064	-2	5.6	173	23	17719	0.79
98RDD-3009	3006	288326	5490033	0.09	15450	-2	0.5	51	4.5	8050	-0.5
98RDD-3011	3007	288000	5489381	-0.05	5515	-2	1.6	46	22	10659	-0.5
98RDD-3012	3008	280623	5484748	-0.05	9501	-2	5.8	31	25	13372	-0.5
98RDD-3013	3009	280572	5484643	-0.05	9112	-2	1.5	53	21	11336	-0.5
98RDD-3014	3010	298650	5496480	0.07	13396	-2	1.1	57	22	8782	-0.5
98RDD-3015	3011	292186	5497390	-0.05	10093	-2	1.4	52	8.9	5448	-0.5
98RDD-3016	3012	292177	5497459	0.07	10920	-2	5.3	183	7.2	6195	-0.5
98RDD-3017	3013	291366	5496932	0.08	19889	-2	22	222	21	5441	0.54
98RDD-3018	3014	288828	5493676	0.06	12090	6	5.4	121	12	7161	-0.5
98RDD-3019	3015	285789	5492744	-0.05	12456	-2	1.4	55	6.9	7844	-0.5
98RDD-3021	3016	284541	5497531	0.05	7454	-2	2.5	63	26	5286	0.64
98RDD-3023	3017	288625	5506577	-0.05	13327	-2	4	115	21	5180	0.61
98RDD-3024	3018	289302	5507944	0.07	10061	-2	6	78	20	4317	-0.5
98RDD-3025	3019	289342	5510241	0.24	18924	-2	1.9	82	14	9494	-0.5
98RDD-3028	3020	296235	5535033	0.16	9210	-2	4.9	108	37	3718	1.08
98RDD-3033	3021	317529	5494284	-0.05	24087	-2	16	158	10	11727	-0.5
98RDD-3034	3022	317409	5494235	-0.05	23876	4	19	365	47	11554	-0.5
98RDD-3037	3023	318115	5494377	-0.05	25021	5	6	169	8.8	8459	-0.5
Soil Sediment Sample											
98RDD-4008	4006	300507	5525824	0.32	23721	17	38	101	3.9	2282	-0.5
		mean		0.06	14713.17	1.97	5.52	103.14	16.67	9001.34	0.35
		median		0.025	12338	1	3	79	14	8284	0.25
		Standard Deviation		0.06	6628.82	2.91	7.47	69.25	11.51	4292.92	0.24
		2 x Standard Deviation		0.13	13257.65	5.81	14.93	138.50	23.01	8585.84	0.49

Stream Sediment Samples	Site	Easting	Northing	Ce	Co	Cr	Cs	Cu	Dy	Er
			units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
			Method	ICPMS	ICPMS	ICPMS	ICPMS	ICPOES	ICPMS	ICPMS
			DL---->	0.01	1	1	0.01	5	0.01	0.01
98RDD-0352	317	282132	5502099	30.66	10.83	24	0.23	17	1.3	0.67
98RDD-0502	452	293611	5502140	149	18.36	60	0.57	35	5.06	2.7
98RDD-0619	558	301894	5490448	10.22	4.05	10	0.18	24	0.56	0.32
98RDD-0647	583	310138	5499160	26.78	7.85	15	0.25	19	1.4	0.68
98RDD-0969	873	264358	5466649	34.13	6.66	26	0.51	21	1.64	0.87
98RDD-2012	1812	314883	5532273	30.01	8.56	36	0.21	12	1.1	0.55
98RDD-2235	2014	321745	5518120	35.66	18	12	0.33	62	2.17	1.08
98RDD-2236	2015	322625	5517107	75.12	15.29	18	0.32	62	4.02	2.39
98RDD-2269	2045	322155	5483492	22.28	14.8	29	0.3	18	1.22	0.58
98RDD-2373	2136	333099	5479367	18.21	9.26	13	0.17	n/a	0.82	0.39
98RDD-3001	3000	312038	5494578	16.64	8.26	13	0.25	9	0.81	0.4
98RDD-3004	3001	308461	5490445	14.77	6.53	14	0.26	9	0.95	0.5
98RDD-3005	3002	299599	5497948	43.26	10.24	34	0.34	18	1.26	0.57
98RDD-3006	3003	299586	5497876	15.98	3.01	10	0.15	n/a	0.67	0.33
98RDD-3007	3004	301784	5495719	32.72	10.12	19	0.45	35	1.26	0.65
98RDD-3008	3005	309882	5493023	12.53	9.05	12	0.57	16	0.66	0.36
98RDD-3009	3006	288326	5490033	32.3	7.27	23	0.36	14	1.24	0.58
98RDD-3011	3007	288000	5489381	9.98	2.13	10	0.42	9	0.51	0.23
98RDD-3012	3008	280623	5484748	21.31	3.06	17	0.35	19	1.14	0.59
98RDD-3013	3009	280572	5484643	19.09	2.99	15	0.46	17	0.89	0.47
98RDD-3014	3010	298650	5496480	54.18	5.96	25	0.38	53	2.23	1.11
98RDD-3015	3011	292186	5497390	22.38	6.04	16	0.43	10	0.8	0.33
98RDD-3016	3012	292177	5497459	29.92	13.92	19	0.27	9	1.01	0.42
98RDD-3017	3013	291366	5496932	29.09	76.01	38	0.89	20	1.1	0.54
98RDD-3018	3014	288828	5493676	20.82	8.06	18	0.52	10	0.84	0.42
98RDD-3019	3015	285789	5492744	16	4.05	15	0.34	10	0.72	0.33
98RDD-3021	3016	284541	5497531	28.67	4.32	16	0.56	12	1.03	0.5
98RDD-3023	3017	288625	5506577	36.84	7.78	19	0.62	18	1.32	0.67
98RDD-3024	3018	289302	5507944	25.28	8.33	15	0.84	15	0.83	0.39
98RDD-3025	3019	289342	5510241	57.85	11.99	25	0.75	69	2.36	1.12
98RDD-3028	3020	296235	5535033	97.99	13.05	15	0.72	24	2.44	1.3
98RDD-3033	3021	317529	5494284	17.43	16.59	36	0.33	15	1.02	0.5
98RDD-3034	3022	317409	5494235	25.21	23.65	39	0.37	28	1.27	0.62
98RDD-3037	3023	318115	5494377	19.49	23.83	44	0.33	23	1.08	0.57
Soil Sediment Sample										
98RDD-4008	4006	300507	5525824	11.86	3.25	48	1.83	50	0.39	0.15
		mean		32.68	11.52	22.80	0.45	23.70	1.35	0.68
		median		25.28	8.33	18	0.36	18	1.1	0.55
		Standard Deviation		27.28	12.55	12.14	0.30	16.83	0.95	0.53
		2 x Standard Deviation		54.56	25.10	24.28	0.61	33.67	1.90	1.07

Stream Sediment Samples	Site	Easting	Northing	Eu	Fe	Gd	Hf	Ho	K	La	Li
			units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
			Method	ICPMS	ICPOES	ICPMS	INAA	ICPMS	ICPOES	ICPMS	ICPMS
			DL—>	0.01	5	0.01	1	0.01	100	0.01	1
98RDD-0352	317	282132	5502099	0.43	56070	2.37	4	0.25	418	16.78	4.8
98RDD-0502	452	293611	5502140	1.9	263411	10	1	1	480	85	4.3
98RDD-0619	558	301894	5490448	0.23	7990	0.94	3	0.11	311	5.19	3.3
98RDD-0647	583	310138	5499160	0.5	15544	2.32	5	0.25	547	13.94	5
98RDD-0969	873	264358	5466649	0.58	23697	2.76	3	0.31	756	18.95	9.2
98RDD-2012	1812	314883	5532273	0.43	26355	2.03	3	0.21	408	15.69	5.3
98RDD-2235	2014	321745	5518120	0.84	18609	3.56	3	0.43	648	20.63	13.7
98RDD-2236	2015	322625	5517107	1.21	23053	6.36	3	0.86	566	38.2	13.3
98RDD-2269	2045	322155	5483492	0.37	34564	1.77	5	0.22	537	10.84	9.8
98RDD-2373	2136	333099	5479367	0.34	18647	1.44	4	0.16	389	9.3	2.9
98RDD-3001	3000	312038	5494578	0.34	14440	1.26	5	0.15	292	7.12	5.4
98RDD-3004	3001	308461	5490445	0.38	10489	1.46	4	0.19	451	7.12	7.5
98RDD-3005	3002	299599	5497948	0.71	23744	2.6	8	0.23	965	20.24	12.8
98RDD-3006	3003	299586	5497876	0.3	7308	1.25	5	0.13	262	7.27	3.5
98RDD-3007	3004	301784	5495719	0.47	12922	2.06	2	0.24	456	15.26	8.1
98RDD-3008	3005	309882	5493023	0.28	25928	0.95	1	0.13	393	4.77	2.9
98RDD-3009	3006	288326	5490033	0.46	13796	2.28	6	0.23	454	15.81	11.6
98RDD-3011	3007	288000	5489381	0.21	5864	0.79	1	0.09	438	5.06	1.6
98RDD-3012	3008	280623	5484748	0.42	4054	1.9	2	0.22	381	11.05	3.5
98RDD-3013	3009	280572	5484643	0.37	4776	1.68	2	0.18	331	10.04	2.9
98RDD-3014	3010	298650	5496480	0.89	9813	4.02	3	0.41	380	28.75	8.4
98RDD-3015	3011	292186	5497390	0.35	10817	1.6	3	0.15	303	11.12	6.7
98RDD-3016	3012	292177	5497459	0.43	41202	1.96	6	0.17	252	14.61	8.8
98RDD-3017	3013	291366	5496932	0.44	215581	1.76	2	0.18	342	11.1	9.1
98RDD-3018	3014	288828	5493676	0.33	23381	1.46	2	0.16	330	9.05	7
98RDD-3019	3015	285789	5492744	0.32	6683	1.27	3	0.14	305	7.79	6.9
98RDD-3021	3016	284541	5497531	0.44	9154	1.86	1	0.19	300	14.88	2.9
98RDD-3023	3017	288625	5506577	0.54	26318	2.52	2	0.26	419	18.31	8
98RDD-3024	3018	289302	5507944	0.31	20369	1.49	2	0.16	582	11.63	6.5
98RDD-3025	3019	289342	5510241	0.78	21630	4.2	7	0.44	709	29.5	16.9
98RDD-3028	3020	296235	5535033	0.75	18544	4.75	-1	0.49	539	47.61	5
98RDD-3033	3021	317529	5494284	0.45	43464	1.62	4	0.2	612	8.08	24
98RDD-3034	3022	317409	5494235	0.55	47998	2.01	3	0.25	721	11.43	22.8
98RDD-3037	3023	318115	5494377	0.44	48822	1.65	6	0.2	680	9.06	32.5
Soil Sediment Sample											
98RDD-4008	4006	300507	5525824	0.24	103046	0.77	4	0.07	1316	6	9.9
		mean		0.52	35945.23	2.36	3.34	0.26	493.51	16.49	8.77
		median		0.43	20369	1.86	3	0.2	438	11.43	7
		Standard Deviation		0.32	54638.71	1.78	1.91	0.19	217.12	15.14	6.67
		2 x Standard Deviation		0.64	109277.42	3.56	3.82	0.39	434.25	30.28	13.33

Stream Sediment Samples	Site	Easting	Northing	Lu	Mg	Mn	Mo	Na	Nd	Ni
			units	ppm	ppm	ppm	ppm	%	ppm	ppm
			Method	ICPMS	ICPOES	ICPOES	ICPMS	INAA	ICPMS	ICPMS
			DL—>	0.01	20	1	1	0.02	0.01	5
98RDD-0352	317	282132	5502099	0.09	2366	283	n/a	2.19	15.03	13.4
98RDD-0502	452	293611	5502140	0.44	1940	1840	2.5	0.14	67.83	19.3
98RDD-0619	558	301894	5490448	0.04	1880	369	1.2	1.7	4.73	13.4
98RDD-0647	583	310138	5499160	0.09	5105	268	n/a	2.2	12.94	13.2
98RDD-0969	873	264358	5466649	0.12	4287	258	1.8	1.1	16.68	17.3
98RDD-2012	1812	314883	5532273	0.08	5006	455	n/a	2.17	12.91	31
98RDD-2235	2014	321745	5518120	0.14	5637	360	n/a	1.6	19.27	37.8
98RDD-2236	2015	322625	5517107	0.39	6358	190	n/a	1.5	34.52	28.7
98RDD-2269	2045	322155	5483492	0.07	7073	996	n/a	1.6	9.68	28.6
98RDD-2373	2136	333099	5479367	0.05	1702	170	n/a	2.23	9.32	6.9
98RDD-3001	3000	312038	5494578	0.05	2835	858	n/a	1.9	7.37	10
98RDD-3004	3001	308461	5490445	0.06	3832	175	n/a	1.9	7.15	12.4
98RDD-3005	3002	299599	5497948	0.08	7825	1443	n/a	2.4	18.85	24.2
98RDD-3006	3003	299586	5497876	0.04	2146	265	n/a	2.09	7.31	6.6
98RDD-3007	3004	301784	5495719	0.09	3536	292	30.2	0.81	12.35	21.1
98RDD-3008	3005	309882	5493023	0.05	2187	639	n/a	0.5	4.91	9
98RDD-3009	3006	288326	5490033	0.06	4931	134	n/a	1.9	14.86	18.7
98RDD-3011	3007	288000	5489381	0.03	1812	83	n/a	0.39	4.7	6.6
98RDD-3012	3008	280623	5484748	0.08	2211	38	1.6	0.73	11.3	11.5
98RDD-3013	3009	280572	5484643	0.07	2059	100	n/a	0.71	9.89	8.8
98RDD-3014	3010	298650	5496480	0.16	3898	213	n/a	1.2	26.66	16.9
98RDD-3015	3011	292186	5497390	0.05	2622	200	n/a	1.7	10.59	9.6
98RDD-3016	3012	292177	5497459	0.05	5082	2403	n/a	2.08	13.56	12.6
98RDD-3017	3013	291366	5496932	0.06	3973	3080	7.8	0.58	11.45	20.8
98RDD-3018	3014	288828	5493676	0.06	2681	735	n/a	1.1	8.64	9.1
98RDD-3019	3015	285789	5492744	0.05	2754	80	n/a	1.6	7.67	9.6
98RDD-3021	3016	284541	5497531	0.06	1543	274	n/a	0.4	13.86	9
98RDD-3023	3017	288625	5506577	0.09	2470	378	n/a	0.84	17.15	11.9
98RDD-3024	3018	289302	5507944	0.05	2551	651	n/a	0.65	10.26	8.7
98RDD-3025	3019	289342	5510241	0.16	6024	241	1.3	1.5	27.83	18.1
98RDD-3028	3020	296235	5535033	0.19	1670	315	n/a	0.17	38.12	10.8
98RDD-3033	3021	317529	5494284	0.07	9920	492	n/a	1.5	8.49	28.7
98RDD-3034	3022	317409	5494235	0.09	11686	4353	n/a	1.1	11.33	31.9
98RDD-3037	3023	318115	5494377	0.08	13791	1077	n/a	1.4	9.17	39.7
Soil Sediment Sample										
98RDD-4008	4006	300507	5525824	0.03	6286	220	2.6	0.73	5.18	12.8
		mean		0.10	4333.69	683.66	6.13	1.32	14.90	16.82
		median		0.07	3536	292	2.15	1.5	11.33	13.2
		Standard Deviation		0.09	2920.29	928.56	9.96	0.66	12.12	9.18
		2 x Standard Deviation		0.18	5840.57	1857.11	19.92	1.32	24.24	18.35

Stream Sediment Samples	Site	Easting	Northing	P	Pb	Pr	Rb	S	Sb	Sc	Sm
			units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
			Method	ICPOES	ICPMS	ICPMS	ICPMS	ICPOES	INAA	ICPMS	ICPMS
			DL---->	50	0.1	0.01	0.01	30	0.2	0.5	0.01
98RDD-0352	317	282132	5502099	560	1.89	4.15	3.24	834	-0.2	4.5	2.5
98RDD-0502	452	293611	5502140	2622	2.61	18.84	6.22	1888	-0.2	13.6	10.2
98RDD-0619	558	301894	5490448	406	3.51	1.28	1.78	3967	-0.2	2.1	0.88
98RDD-0647	583	310138	5499160	757	1.48	3.52	3.58	1458	-0.2	3.3	2.35
98RDD-0969	873	264358	5466649	1239	4.92	4.57	7.33	2924	-0.2	4.6	2.87
98RDD-2012	1812	314883	5532273	628	1.93	3.66	2.44	457	-0.2	2.7	2.04
98RDD-2235	2014	321745	5518120	800	2.24	5.19	4.84	1830	-0.2	4.1	3.49
98RDD-2236	2015	322625	5517107	658	1.98	9.18	4.33	3766	-0.2	5.4	5.91
98RDD-2269	2045	322155	5483492	590	2.24	2.65	4.34	227	-0.2	4.9	1.8
98RDD-2373	2136	333099	5479367	648	2.78	2.52	2.23	362	-0.2	2.1	1.55
98RDD-3001	3000	312038	5494578	619	3.65	1.92	1.64	475	-0.2	2.7	1.3
98RDD-3004	3001	308461	5490445	528	2.58	1.85	2.05	419	-0.2	3	1.33
98RDD-3005	3002	299599	5497948	1239	4.32	5.15	5.82	186	-0.2	3.9	3
98RDD-3006	3003	299586	5497876	459	2.84	1.98	1.27	241	-0.2	2.1	1.28
98RDD-3007	3004	301784	5495719	805	27.62	3.46	4.17	5740	-0.2	3.3	2.02
98RDD-3008	3005	309882	5493023	1231	9.38	1.26	4.06	3799	-0.2	2.9	0.94
98RDD-3009	3006	288326	5490033	991	3.52	4.08	4.37	235	-0.2	3.5	2.49
98RDD-3011	3007	288000	5489381	722	12.28	1.22	2.47	3098	-0.2	1.9	0.82
98RDD-3012	3008	280623	5484748	733	2.57	2.95	2.17	5280	-0.2	2.6	1.98
98RDD-3013	3009	280572	5484643	705	6.92	2.63	2.77	3071	-0.2	2	1.78
98RDD-3014	3010	298650	5496480	752	2.78	7.39	2.86	2001	-0.2	5.4	4.16
98RDD-3015	3011	292186	5497390	529	7.56	2.93	2.72	920	-0.2	2.5	1.74
98RDD-3016	3012	292177	5497459	922	7.44	3.68	2.12	423	-0.2	3	2.16
98RDD-3017	3013	291366	5496932	2128	16.1	3.1	5.84	1273	0.4	4.1	1.92
98RDD-3018	3014	288828	5493676	962	6.18	2.37	2.8	2114	-0.2	3	1.49
98RDD-3019	3015	285789	5492744	436	4.34	2.08	1.95	951	-0.2	2.3	1.26
98RDD-3021	3016	284541	5497531	717	21.03	3.79	3.55	2618	-0.2	1.7	2.11
98RDD-3023	3017	288625	5506577	764	18.54	4.67	5.05	2285	0.3	3.6	2.44
98RDD-3024	3018	289302	5507944	1189	44.68	2.86	6.67	1799	0.4	1.9	1.56
98RDD-3025	3019	289342	5510241	1071	8.65	7.89	7.33	1794	-0.2	6.2	4.55
98RDD-3028	3020	296235	5535033	992	39.58	11.11	6.26	4410	0.4	2.8	5.21
98RDD-3033	3021	317529	5494284	761	3.98	2.27	4.77	319	0.2	6	1.66
98RDD-3034	3022	317409	5494235	1084	13.56	3.02	5.64	906	0.3	6.6	2.14
98RDD-3037	3023	318115	5494377	773	4.21	2.46	6.82	356	0.2	8.3	1.7
Soil Sediment Sample											
98RDD-4008	4006	300507	5525824	690	11.64	1.43	11.18	1677	1.2	4.4	0.9
		mean		877.43	8.90	4.09	4.19	1831.51	0.17	3.91	2.44
		median		757	4.32	3.02	4.06	1677	0.1	3.3	1.98
		Standard Deviation		442.90	10.33	3.40	2.15	1532.87	0.20	2.29	1.80
		2 x Standard Deviation		885.81	20.67	6.80	4.30	3065.74	0.40	4.58	3.60

Stream Sediment Samples	Site	Easting	Northing	Sr	Tb	Th	Ti	Tl	Tm	U	U
			units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
			Method	ICPOES	ICPMS	INAA	ICPOES	ICPMS	ICPMS	ICPMS	INAA
			DL---->	1	0.01	0.5	3	0.05	0.01	0.02	0.5
98RDD-0352	317	282132	5502099	22	0.31	6.1	717	0.1	0.09	1.06	1.5
98RDD-0502	452	293611	5502140	13	1.25	8.6	326	0.12	0.39	0.7	0.8
98RDD-0619	558	301894	5490448	31	0.14	1.5	277	n/a	0.04	2.17	2.9
98RDD-0647	583	310138	5499160	41	0.31	3.2	724	0.07	0.08	0.83	1.3
98RDD-0969	873	264358	5466649	26	0.37	4.3	842	0.08	0.13	1.06	1.4
98RDD-2012	1812	314883	5532273	23	0.26	4	479	0.06	0.08	0.52	0.9
98RDD-2235	2014	321745	5518120	62	0.47	2.5	1184	0.13	0.15	1.27	1.5
98RDD-2236	2015	322625	5517107	43	0.83	4.2	783	0.09	0.34	2.06	2.9
98RDD-2269	2045	322155	5483492	37	0.26	3.8	1913	n/a	0.08	0.45	1.1
98RDD-2373	2136	333099	5479367	31	0.18	2.4	458	0.06	0.06	0.56	0.8
98RDD-3001	3000	312038	5494578	28	0.17	3.2	741	0.06	0.05	0.4	0.9
98RDD-3004	3001	308461	5490445	42	0.19	2.2	761	n/a	0.06	0.47	0.9
98RDD-3005	3002	299599	5497948	52	0.33	6.4	1457	0.07	0.09	0.7	1.2
98RDD-3006	3003	299586	5497876	28	0.16	2.6	641	n/a	0.04	0.62	0.8
98RDD-3007	3004	301784	5495719	32	0.29	2.3	594	0.14	0.09	0.62	0.6
98RDD-3008	3005	309882	5493023	31	0.14	1.6	219	0.14	0.06	0.29	0.5
98RDD-3009	3006	288326	5490033	32	0.29	4.7	1194	0.05	0.07	0.6	1.4
98RDD-3011	3007	288000	5489381	31	0.11	1.6	137	n/a	0.03	0.38	0.5
98RDD-3012	3008	280623	5484748	29	0.25	2.1	266	0.06	0.08	1.86	1.9
98RDD-3013	3009	280572	5484643	30	0.22	2	232	n/a	0.07	0.83	1
98RDD-3014	3010	298650	5496480	34	0.51	5.2	808	0.08	0.16	1.35	1.7
98RDD-3015	3011	292186	5497390	24	0.2	2.6	559	0.09	0.06	0.44	0.9
98RDD-3016	3012	292177	5497459	31	0.24	3.8	735	0.18	0.05	0.46	0.9
98RDD-3017	3013	291366	5496932	21	0.23	3.4	790	0.14	0.08	1.94	2.1
98RDD-3018	3014	288828	5493676	28	0.19	3.1	529	0.09	0.06	0.8	1.2
98RDD-3019	3015	285789	5492744	36	0.17	2.5	624	0.06	0.04	0.68	1
98RDD-3021	3016	284541	5497531	24	0.24	2.5	176	0.06	0.07	0.54	0.6
98RDD-3023	3017	288625	5506577	23	0.31	4.5	445	0.1	0.09	1.17	1.4
98RDD-3024	3018	289302	5507944	22	0.19	3.6	356	0.12	0.06	1.32	1.5
98RDD-3025	3019	289342	5510241	33	0.54	7.1	1161	0.21	0.16	1.86	2.5
98RDD-3028	3020	296235	5535033	20	0.62	5	215	0.23	0.19	2.18	1.9
98RDD-3033	3021	317529	5494284	39	0.22	2.7	1351	n/a	0.08	0.44	1
98RDD-3034	3022	317409	5494235	34	0.27	3	627	0.08	0.1	0.99	1.5
98RDD-3037	3023	318115	5494377	30	0.24	3.9	1280	0.05	0.08	0.52	1.2
Soil Sediment Sample											
98RDD-4008	4006	300507	5525824	24	0.1	2.6	1143	0.35	0.02	0.25	1
		mean		31.06	0.31	3.57	706.97	0.11	0.10	0.93	1.29
		median		31	0.24	3.2	641	0.09	0.08	0.7	1.2
		Standard Deviation		9.32	0.22	1.62	416.37	0.07	0.08	0.58	0.61
		2 x Standard Deviation		18.65	0.45	3.25	832.74	0.13	0.15	1.16	1.21

Stream Sediment Samples	Site	Easting	Northing	V	W	Y	Yb	Zn	Zn	LOI
			units	ppm	ppm	ppm	ppm	ppm	ppm	%
			Method	ICPOES	ICPMS	ICPMS	ICPMS	ICPMS	ICPOES	Grav.
			DL—>	5	0.05	0.5	0.01	5	2	0.1
98RDD-0352	317	282132	5502099	87	0.12	6.33	0.6	518	539	8.58
98RDD-0502	452	293611	5502140	295	0.26	29.66	2.65	139	170	40.87
98RDD-0619	558	301894	5490448	25	0.06	3.21	0.28	28	29	23.00
98RDD-0647	583	310138	5499160	54	0.07	6.99	0.52	44	46	3.68
98RDD-0969	873	264358	5466649	70	0.09	8.57	0.78	78	82	36.49
98RDD-2012	1812	314883	5532273	46	0.1	5.67	0.51	37	41	4.79
98RDD-2235	2014	321745	5518120	113	n/a	11.78	0.89	93	94	12.75
98RDD-2236	2015	322625	5517107	88	0.07	27.32	2.36	97	92	13.68
98RDD-2269	2045	322155	5483492	226	n/a	6.02	0.51	79	76	2.71
98RDD-2373	2136	333099	5479367	32	0.07	4.14	0.38	43	47	4.22
98RDD-3001	3000	312038	5494578	48	n/a	3.91	0.34	50	51	5.64
98RDD-3004	3001	308461	5490445	51	n/a	4.7	0.38	41	41	4.24
98RDD-3005	3002	299599	5497948	70	0.06	6.09	0.54	57	59	1.79
98RDD-3006	3003	299586	5497876	27	n/a	3.22	0.32	23	23	2.81
98RDD-3007	3004	301784	5495719	49	0.05	7.15	0.64	89	87	31.37
98RDD-3008	3005	309882	5493023	28	0.07	3.38	0.34	87	84	55.70
98RDD-3009	3006	288326	5490033	71	0.05	5.91	0.48	37	35	3.78
98RDD-3011	3007	288000	5489381	10	0.12	2.39	0.19	20	18	59.20
98RDD-3012	3008	280623	5484748	39	0.09	5.67	0.49	22	20	44.62
98RDD-3013	3009	280572	5484643	18	0.16	4.76	0.41	30	29	45.67
98RDD-3014	3010	298650	5496480	67	0.06	11.1	1.05	51	47	34.85
98RDD-3015	3011	292186	5497390	49	n/a	3.72	0.33	33	32	10.36
98RDD-3016	3012	292177	5497459	74	0.18	4.32	0.4	48	54	6.13
98RDD-3017	3013	291366	5496932	230	0.44	4.81	0.43	218	240	30.66
98RDD-3018	3014	288828	5493676	52	0.18	4.13	0.34	67	69	27.65
98RDD-3019	3015	285789	5492744	39	0.07	3.58	0.32	32	31	8.25
98RDD-3021	3016	284541	5497531	39	0.11	4.7	0.45	39	39	47.28
98RDD-3023	3017	288625	5506577	60	0.06	6.78	0.62	76	76	34.53
98RDD-3024	3018	289302	5507944	54	0.14	3.7	0.35	47	47	38.36
98RDD-3025	3019	289342	5510241	82	0.15	11.49	1.05	124	122	22.54
98RDD-3028	3020	296235	5535033	82	0.09	14.11	1.22	89	87	48.93
98RDD-3033	3021	317529	5494284	153	n/a	5.22	0.4	88	93	4.75
98RDD-3034	3022	317409	5494235	118	0.07	6.44	0.58	118	124	15.13
98RDD-3037	3023	318115	5494377	188	n/a	5.48	0.47	103	105	5.40
Soil Sediment Sample										
98RDD-4008	4006	300507	5525824	89	0.14	1.52	0.14	74	88	9.67
		mean		80.65	0.12	7.08	0.62	80.54	83.34	21.43
		median		60	0.09	5.48	0.47	57	59	13.679
		Standard Deviation		64.70	0.08	6.02	0.53	86.28	91.22	17.98
		2 x Standard Deviation		129.41	0.16	12.04	1.06	172.56	182.43	35.96

APPENDIX E

Lithogeochemical analyses by ICP-MS and INAA for rock and boulder samples from the Tommyhow Lake and Mooseland River areas.

ICP-MS

rock sample number	site	easting Nad 27 UTM Zone 16	northing Method—> Units—> D.L.—>	Al ICPMS ppm 30	B ICPMS ppm 5	Ba ICPMS ppm 3	Ca ICPMS ppm 20	Cd ICPMS ppm 2	Co ICPMS ppm 5	Cr ICPMS ppm 4	Cu ICPMS ppm 5	Fe ICPMS ppm 5
98RDD-4002	4000	300507	5525824	24192	<5	165	3849	16	<5	<4	26	76336
98RDD-4003	4001	300507	5525824	83910	10	475	19536	10	5	19	8	49792
98RDD-4004	4002	300507	5525824	10429	<5	75	1390	18	17	<4	31	87770
98RDD-4005	4003	300507	5525824	74590	<5	643	10552	22	<5	<4	11	95894
98RDD-4006	4004	300507	5525824	87840	<5	914	11521	4	5	29	8	29262
98RDD-4007	4005	300507	5525824	15059	<5	81	14431	11	<5	<4	10	53339
98RDD-4009	4007	300507	5525824	16865	<5	304	3333	37	<5	<4	58	50007
98RDD-4010	4008	300507	5525824	86459	<5	313	18740	<2	<5	8	6	17192
98RDD-4011	4009	300507	5525824	67791	12	230	20475	4	<5	8	8	32535
98RDD-4013	4010	317529	5494284	1139	<5	16	2813	<2	<5	<4	<5	17602
98RDD-4014	4011	317529	5494284	508	<5	32	539	<2	<5	<4	<5	6147
98RDD-4015	4012	317409	5494235	68734	15	158	29656	20	43	9	120	85587
98RDD-4016	4013	318115	5494377	1246	<5	17	839	<2	<5	<4	<5	7732

INAA

rock sample number	site	easting Nad 27 UTM Zone 16	northing Method—> Units—> D.L.—>	Au INAA ppb 2	As INAA ppm 0.5	Ba INAA ppm 50	Br INAA ppm 0.5	Ce INAA ppm 5	Co INAA ppm 1	Cr INAA ppm 10	Cs INAA ppm 2	Eu INAA ppm 0.2
98RDD-4002	4000	300507	5525824	4	45	150	1.2	13	1	15	-2	0.5
98RDD-4003	4001	300507	5525824	-2	9.3	470	-0.5	40	3	34	3	1.3
98RDD-4004	4002	300507	5525824	11	6.8	-50	1.1	-5	23	-10	-2	-0.2
98RDD-4005	4003	300507	5525824	-2	3.6	610	-0.5	25	1	22	-2	0.6
98RDD-4006	4004	300507	5525824	-2	14	860	-0.5	43	4	33	-2	1.3
98RDD-4007	4005	300507	5525824	-2	31	67	0.5	9	1	-10	-2	0.6
98RDD-4009	4007	300507	5525824	40	15	310	0.8	-5	2	41	-2	0.4
98RDD-4010	4008	300507	5525824	-2	1.9	310	0.6	16	4	-10	2	0.6
98RDD-4011	4009	300507	5525824	-2	135	290	5.1	29	2	-10	-2	1.1
98RDD-4013	4010	317529	5494284	-2	4.7	-50	11	-5	-1	-10	-2	-0.2
98RDD-4014	4011	317529	5494284	-2	5.4	-50	16	-5	1	-10	-2	-0.2
98RDD-4015	4012	317409	5494235	-2	26	-50	3.2	9	52	37	-2	0.8
98RDD-4016	4013	318115	5494377	-2	2.6	-50	29	-5	-1	-10	-2	-0.2

rock sample number	site	easting Nad 27 UTM Zone 16	northing Method—> Units—> D.L.—>	K ICPMS ppm 100	Li ICPMS ppm 3	Mg ICPMS ppm 20	Mn ICPMS ppm 1	Na ICPMS ppm 10	Ni ICPMS ppm 5	P ICPMS ppm 50	S ICPMS ppm 30	Sc ICPMS ppm 1
98RDD-4002	4000	300507	5525824	6406	<3	1874	316	6058	7	548	6754	4
98RDD-4003	4001	300507	5525824	19424	10	5196	2311	20988	9	598	17020	13
98RDD-4004	4002	300507	5525824	2158	<3	363	39	3293	39	220	79100	1
98RDD-4005	4003	300507	5525824	22064	10	3108	1561	15737	9	719	5576	9
98RDD-4006	4004	300507	5525824	27012	20	3569	966	18676	7	409	10755	18
98RDD-4007	4005	300507	5525824	4454	<3	16846	2738	1953	9	413	6061	4
98RDD-4009	4007	300507	5525824	9062	<3	2262	343	5717	13	710	24138	3
98RDD-4010	4008	300507	5525824	11319	7	2968	611	36192	5	431	2062	6
98RDD-4011	4009	300507	5525824	10847	<3	3227	258	23179	6	415	9881	6
98RDD-4013	4010	317529	5494284	395	<3	162	86	186	<5	453	401	<1
98RDD-4014	4011	317529	5494284	108	<3	232	217	192	<5	N.D.	305	<1
98RDD-4015	4012	317409	5494235	9764	33	51136	1616	9804	62	666	220	34
98RDD-4016	4013	318115	5494377	316	<3	629	57	239	<5	60	131	1

rock sample number	site	easting Nad 27 UTM Zone 16	northing Method—> Units—> D.L.—>	Fe INAA % 0.2	Hf INAA ppm 1	La INAA ppm 1	Lu INAA ppm 0.05	Na INAA % 0.02	Nd INAA ppm 5	Rb INAA ppm 30	Sb INAA ppm 0.2	Sc INAA ppm 0.2
98RDD-4002	4000	300507	5525824	9.2	5	9	0.07	0.68	9	-30	3.6	4.7
98RDD-4003	4001	300507	5525824	5.3	8	23	0.19	2.21	15	52	3.2	16
98RDD-4004	4002	300507	5525824	10	11	2	-0.05	0.38	-5	-30	5.2	1.3
98RDD-4005	4003	300507	5525824	9.3	5	15	0.11	1.5	12	74	3.1	10
98RDD-4006	4004	300507	5525824	2.9	7	21	0.24	1.8	16	68	1.7	21.9
98RDD-4007	4005	300507	5525824	5.3	9	6	0.09	0.19	8	-30	2.2	4.3
98RDD-4009	4007	300507	5525824	10	4	7	0.08	0.6	8	-30	1.1	3
98RDD-4010	4008	300507	5525824	1.7	6	10	0.06	3.88	9	31	1.2	7.6
98RDD-4011	4009	300507	5525824	3.4	8	16	0.18	2.41	12	45	1.6	7.6
98RDD-4013	4010	317529	5494284	1.9	15	-1	-0.05	-0.02	-5	-30	-0.2	0.5
98RDD-4014	4011	317529	5494284	0.6	17	-1	-0.05	-0.02	-5	-30	-0.2	0.2
98RDD-4015	4012	317409	5494235	9	2	6	0.2	1	9	40	1.7	41.2
98RDD-4016	4013	318115	5494377	0.8	10	-1	-0.05	0.03	6	-30	-0.2	1

rock sample number	site	easting Nad 27 UTM Zone 16	northing Method--> Units--> D.L.-->	Sr ICPMS ppm 1	Ti ICPMS ppm 3	V ICPMS ppm 5	Y ICPMS ppm 2	Zn ICPMS ppm 2
98RDD-4002	4000	300507	5525824	72	633	36	3	24
98RDD-4003	4001	300507	5525824	230	3434	128	8	29
98RDD-4004	4002	300507	5525824	27	196	13	<2	16
98RDD-4005	4003	300507	5525824	132	2588	87	6	35
98RDD-4006	4004	300507	5525824	146	2626	161	13	32
98RDD-4007	4005	300507	5525824	31	811	31	6	79
98RDD-4009	4007	300507	5525824	125	2587	36	3	47
98RDD-4010	4008	300507	5525824	227	2212	48	4	30
98RDD-4011	4009	300507	5525824	197	1522	48	6	23
98RDD-4013	4010	317529	5494284	8	25	8	2	5
98RDD-4014	4011	317529	5494284	9	60	<5	<2	10
98RDD-4015	4012	317409	5494235	14	4087	242	9	110
98RDD-4016	4013	318115	5494377	10	76	6	<2	6

rock sample number	site	easting Nad 27 UTM Zone 16	northing Method--> Units--> D.L.-->	Sm INAA ppm 0.1	Ta INAA ppm 1	Tb INAA ppm 0.5	Th INAA ppm 0.5	U INAA ppm 0.5	W INAA ppm 4	Yb INAA ppm 0.05	WT g 0.1
98RDD-4002	4000	300507	5525824	1.1	-1	-0.5	2.7	-0.5	-4	0.47	39.4
98RDD-4003	4001	300507	5525824	3.1	-1	-0.5	3.4	-0.5	-4	1.3	38.2
98RDD-4004	4002	300507	5525824	0.35	-1	-0.5	-0.5	-0.5	-4	0.15	40.8
98RDD-4005	4003	300507	5525824	1.7	1	-0.5	3.4	-0.5	-4	0.76	41.3
98RDD-4006	4004	300507	5525824	3.4	2	0.8	2.3	-0.5	-4	1.7	40.2
98RDD-4007	4005	300507	5525824	0.73	-1	0.6	1.3	-0.5	-4	0.58	39
98RDD-4009	4007	300507	5525824	0.63	-1	-0.5	2.1	-0.5	-4	0.39	40.3
98RDD-4010	4008	300507	5525824	1.3	1	-0.5	2.6	-0.5	-4	0.58	41.7
98RDD-4011	4009	300507	5525824	2.1	-1	-0.5	3.8	1.1	-4	1.2	40.9
98RDD-4013	4010	317529	5494284	0.16	-1	-0.5	-0.5	-0.5	-4	0.32	41
98RDD-4014	4011	317529	5494284	0.13	-1	-0.5	-0.5	-0.5	-4	0.07	41.7
98RDD-4015	4012	317409	5494235	1.9	-1	-0.5	1	-0.5	-4	1.3	41.7
98RDD-4016	4013	318115	5494377	0.16	-1	-0.5	-0.5	-0.5	-4	0.15	41.3

APPENDIX F

Summary table of KIMs, MMSIMs and gold grains in alluvial sediment samples.

Summary Table for KIMs, MMSIMs and Gold Grains in Alluvial Sediment Samples

Alluvial Sediment Sample	Site	Easting UTM Zone 16	Northing	Number of Gold grains	Kim counts Cr	MMSIM counts							
						Sil.%	Rut.%	Spinel grains	Fay.%	Opx.%	Py. %	Cpy.%	Other
98RDD-5001	5000	308591	5490551	no visible gold	0	0	0	0	5	0	Tr (2 gr)	0	0
98RDD-5002	5001	296230	5535065	no visible gold	0	Tr	0	0	4	Tr	0	0	0
98RDD-5003	5002	317838	5494152	no visible gold	1	0	0	1 black Cr-spinel	0.5	Tr	Tr (1 gr)	0	0
98RDD-5004	5003	317445	5494317	no visible gold	0	0	Tr (3 gr)	0	0.25	0	0	Tr (1 gr)	Tr very low Cr-diopside

Notes:

Kim = Kimberlite Indicator Minerals
Cr = Chromite
MMSIM = metamorphosed massive sulphide/magmatic indicator mineral
Sil. = Sillimanite
Rut. = Rutile
Fay. = Fayalite
Opx. = Orthopyroxene
Py. = Pyrite
Cpy. = Chalcopyrite

Electron Microprobe Analysis

Alluvial Sediment Sample	Site	Mineral Sample	SiO_2 wt.%	TiO_2 wt.%	Nb_2O_5 wt.%	Al_2O_3 wt.%	Cr_2O_3 wt.%	V_2O_5 wt.%	MgO wt.%	MnO wt.%	FeO wt.%	Fe_2O_3 wt.%	NiO wt.%	ZnO wt.%	CaO wt.%	Na_2O wt.%	K_2O wt.%
98RDD-5001	5000	Ilmenite	0.03	50.20	0.02	0.03	0.04	0.55	0.22	0.65	45.03	3.34	0.00	0.00	n.d	n.d	n.d
98RDD-5001	5000	Ilmenite	0.04	50.74	0.00	0.00	0.01	0.15	0.23	1.04	44.43	3.64	0.02	0.01	n.d	n.d	n.d
98RDD-5001	5000	Pyroxene	50.92	0.63	n.d.	1.98	0.03	n.d.	13.78	0.36	15.39	n.d.	n.d.	n.d.	16.06	0.25	0.00
98RDD-5003	5002	Ilmenite	0.02	49.54	0.00	0.01	0.02	0.08	0.21	0.73	43.59	6.01	0.00	0.00	n.d	n.d	n.d
98RDD-5003	5002	Chromite	0.00	0.25	0.00	12.06	53.42	0.08	6.16	0.38	24.11	3.16	0.07	0.34	n.d	n.d	n.d
98RDD-5004	5003	Pyroxene	54.37	0.04	n.d.	0.76	0.52	n.d.	15.66	0.15	4.40	n.d.	n.d.	n.d.	22.68	0.98	0.00

Note: 1) Not Determined = n.d.

Metric Conversion Table

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 023	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
		MASS			
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 90**	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

	Multiplied by	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.

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micromedia
a division of IHS Canada

20 Victoria Street
Toronto, Ontario M5C 2N8
Tel.: (416) 362-5211
Toll Free: 1-800-387-2689
Fax: (416) 362-6161
Email: info@micromedia.on.ca